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ABSTRACT

Nine position statements prepared for the proposed Inter-Com Symposium of 1976 are presented here. Contributions include the following: "A Philosophical Mini-Position-Statement" (William Work), "Development of Communication Resources through an Experiential Future-Focused Role-Image and Function-Oriented Curriculum: The Task of Communication Educators" (Cassandra L. Book), "Research on Teacher Behavior in Classroom Interaction: A Position" (Gus Friedrich), "Futures of Human Communication: I" (L.S. Harms), "Multi-Cultural Communication and Mental Health" (Elizabeth N. Kunimoto), "Overload: The Receiver's Condition" (Jody L. Nyquist), and "Communication Education for Yesterday, Today, and Tomorrow--First Things First" (Carol Ann Valentine). Position papers by Caroline Drummond Hamsher, Mary-Linda Merriam, and Jo Sprague are included. An appendix, "Life-long Learning: A Challenge," an article reprinted from the March 1976 issue of "The Innovator," completes the paper. (KS)

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Communication Education Futures:
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CS 501 691

INTER-COM '76

A Philosophical Mini-Position-Statement

Bill Work

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"When all is said and done, there's a lot more said than done!" - Ziggy

* * * * * * * * *

We are often reminded of George Santayana's dictum that one ignores history at the risk of repeating the mistakes of the past. To ignore the future is to condemn oneself to manipulation by forces largely outside of one's own control. Memory has, quite properly, been identified as one of the critical faculties separating humankind from other animals. The counterpart faculty-- the ability to plan ahead-- is equally critical. Increasingly-- for individuals, groups, and for society-at-large-- coping with an uncertain tomorrow appears to be a survival skill. Inter-Com seeks to extract meaning from a synthesis drawn from our yesterdays, from our todays, and from our best assessments of the options for tomorrow.

Many people are cynical about the value of meetings and seminars and conferences. And well they might be! The 1970 White House Conference on Children and Youth noted-- to cite one example-- that some 85% (as I recall) of the recommendations of the 1960 Conference remained unimplemented. Talk that recommends change but that does not result in change is wasted talk.

Inter-Com '76 was certainly never conceived as "just another conference." It is premised on the conviction that informed, experienced, concerned people can use communication processes effectively in translating thought to action. It is premised on the belief that a group can often carry out tasks more

effectively than can the individuals of which it is composed. If we who are communication specialists cannot make group processes work efficiently in the service of our own ends in Calgary, then we'd better re-examine what we are about!

Inter-Com was designed as an international, interdisciplinary, interactive project. While it retains much of that original flavor, we have substantially lost our United Kingdom representation, and we have lost the potentially catalytic contributions of the experts from related disciplines. Still, we are meeting in a stimulating cultural/educational environment that is different for many of us, and we will have a good 'mix' of people from the United States and from the Commonwealth. Nothing, of course, has happened to diminish our potential for 'interactivity.'

The evolution of Inter-Com '75--Canterbury to Inter-Com '76--Calgary has had several serendipitous consequences. Perhaps the most important of these is the fact that phase one of the National Project on Speech Communication Competencies, carried out by a research team headed by Ron Allen, is now complete. That investigation provides Inter-Com with research and development findings of fundamental importance, and it provides us with a new and useful focus for our deliberations. (The Competencies Project report is "in press"; at this writing it is not yet clear in what form we will make it available to Inter-Com participants.). Additionally-- and with all deference to Christ's Church College in Canterbury-- the meeting resources available at Mount Royal College are superior.

Although we all, to an extent, see what we want to see, hear what we want to hear, and believe what we want to believe, there is no doubt that the study of communication-- and helping others to be more effective communicators-- will

assume increasing importance in the years ahead. Our concerns and our expertise will find new consumers-- in both old and new markets. We will be sought after-- particularly insofar as we are able to demonstrate our usefulness in helping our increasingly beleagured social institutions to cope and survive. As the world moves inexorably from the age of independence to the age of interdependence, the communication profession will be faced with new challenges. Inter-Com seeks to identify those challenges and develop guidelines for dealing with them.

Erik Barnouw, presently a Fellow at the Woodrow Wilson International Center for Scholars at the Smithsonian Institution, said of the future, in an address prepared for the May 6-7, 1976 Library of Congress symposium on "The American Revolution: A Continuing Commitment,":

> Nightmare or Utopia, which will it be? Both would seem possible. And perhaps that is the reason for the rise of interest in problems of communication. It is only in this age of mass communication that communication has become a problem. The study of influences, of control points, of gatekeepers, of unspoken premises, of subliminal seductions, all acquire an urgency they never had.

Some among us have expressed concern about the ability of Inter-Com to deal, in a useful way, with the future. But the "future" quickly becomes the "present"; and the "present" as quickly recedes into the "past." "Past," "present" and "future" are not as separable as the separate words suggest. To an extent, we are all captives of the past, and of necessity we must all cope as best we can with the present. And all of education is, in one sense, for tomorrow. By examining tomorrow's probabilities today, we should be able to organize for more effective learning when tomorrow comes. No one would argue that this examination should be carried out in anything less than the most realistic and the most critical view possible of today's educational climate.

(If universal, systematic instruction in speech communication is a substantially unrealized goal in 1976, what are realistic possibilities for 1986 and 1996?)

* * * * * *

The sophistications of "learning" take us, sometimes, far from the real world. Our efforts to understand nature-- to convince ourselves that it is rational and orderly-- lead us to create artificial taxonomies that often hamper our search for 'truth.' Thus, for example, we talk about the mind, the soul and the body; the cognitive, the affective, the psychomotor; speaking, listening, reading, writing; communications for controlling, feeling, informing, ritualizing, imagining; arts, sciences, humanities. If we are not careful, we may be deluded into believing that such categories are truly discrete.

Taxonomies are simplistic devices that are well adapted to descriptions of the physical world. Much of what we see around us can be readily classified into animal, vegetable or mineral; the periodic table serves admirably to identify and differentiate the elements that make up the universe; it is useful to study the human body in terms of its various 'systems': circulatory, neural, digestive, respiratory, skeletal, and so on.

Taxonomies-- and other conceptual models-- work less well when applied to human behaviors-- particularly complex behaviors such as those involved in communication. The act of communicating is more art than science, more unpredictable than predictable, more idiosyncratic than universal. Increasingly, humankind is being forced to deal with such complexities, with various shades of gray, with models that are fluid and multidimensional, with possibilities rather than with clear-cut alternatives. Somehow, in Calgary, we must accommodate to these realities. At the same time, we must make certain that these same realities do not unduly discourage or otherwise inhibit us.

* * * * * *

The central question to which Inter-Com addresses itself has not changed: "What can the educational community do to insure that the young will secure the communication competencies needed to function in a rapidly changing world?" It is a large order!

By the educational community, we mean primarily persons associated with formal educational institutions and structures: teachers, students, administrators, boards of education, creators of learning resources for use in the schools, and so on. We should also include in our thinking the learning that takes place informally and incidentally-- often as a by-product of other activities. (Kids learn a great deal about interpersonal communication and communication systems through commercial TV. How can these experiences be 'integrated' with more formal learning experiences?)

Reference is made to the "young." We should also be concerned with the communication education needs of the not-so-young. It seems likely that "lifelong learning" will increasingly, in the future, become a sine qua non. It seems unlikely that we will be able to equip young people adequately for continuous, lifelong self-renewal. In this regard, we should be concerned about the communication competence demands of a lifetime devoted to several careers rather than to one or perhaps two.

Identification of "the communication competencies needed to function" is necessarily a central concern of Inter-Com. A number of questions come to mind. Is it still useful (as it seemed to be in years past) to talk about a hierarchy of communication competencies that are required (a) for survival, (b) for vocational 'success,' and (c) for leadership roles? Is it helpful to think of "terminal competencies" in speech communication-- target competencies that should be expected of all-- or nearly all-- "high school graduates"? Does the

knowledge/skills/values breakdown have utility? Does it help to think of competence in different settings: home, school, work, leisure-time? Which of the competencies, once achieved, are secure for a lifetime. (Once you have learned to ride a bicycle, it is said, you never forget!) Which of the competencies atrophy and/or disappear through neglect? Are there fundamental communication 'skills' that, like building blocks, may be used in an almost unlimited number of variations and combinations? If so, can they be identified, and can we devise instructional strategies to cultivate them? To what extent can we generalize about functional communicative competence? Are the criteria by which functional competence is judged 'fixed'? Are there any absolute standards of competence? Or are all standards relative-- determined by immediate, pragmatic considerations? To what extent should the individual be the arbiter of his/her own communicative competence, and to what extent are these matters dictated by society? Are self-perceptions of competence as important as the perceptions of others? Are there, after adulthood is reached, developmental factors affecting functional communicative competence? What are the implications of the probability that many forms of direct, interpersonal communication will be replaced by 'machine communication'? And so on. And so on.

Finally, what are the implications of the phrase, "in a rapidly changing world?" Philosophers tell us that the only certainty for tomorrow is change. Heraclitus noted almost 2500 years ago that there is nothing permanent except change. The French have a saying that the more things change the more they stay the same. We are faced with perplexing dilemmas!

What does it mean for Inter-Com '76 when we are told that linear change has given way to exponential change? Doubtless we can safely predict that social

change will continue to outstrip genetic change, that the rate of change will continue to accelerate, and that adaptability to change will increasingly be required of both individuals and social institutions (including education!). Communication environments will change; communication technology will change; communication overload will be more threatening to more people; communication isolation and communication interdependence will increase simultaneously; communication freedoms (where they exist) will be challenged; present-day communication ethics will be found to be seriously deficient; new relationships between direct interpersonal and mediated communications will be forged; and so on. Our educational systems and personnel-- students and teachers-- will be hard-pressed to keep up. Structured learning, we are told, will largely take place through human/machine interactions.

Several years ago, a group of leading educators and 'futurists' made Delphi predictions about education in 1985. Their findings included: growing emphasis on measurable skills as a requirement for graduation; 75% of the students' time will be spent in individualized instruction in 50% of the nation's schools; 75% of three and four-year-olds will be enrolled in schools; co-curricular activities will receive significantly less direct support. Many predict that by the year 2000-- now less than 25 years away-- the self-contained classroom will have completely disappeared.

James O'Toole's recent observation is sobering:

> In the short period during which futurists have been practicing their craft, they have made one discovery of fundamental importance: the future cannot be predicted. The most that can be done is to identify the choices that society can make and to explore the possible long-term consequences of each choice. (The Washington Post, 7/4/76, B-1)

* * * * * * *

Inter-Com has had an unexpectedly long-- and somewhat tortuous-- history. A third international conference on the teaching and learning of English (to build upon the 1967 Dartmouth and the 1971 York Conferences) was scheduled for Canada in 1975. That conference was to have been held in Banff (which we will visit during Inter-Com), but it was cancelled for want of outside funding. We have lost some of our Inter-Com delegates-- in most cases for valid and even compelling reasons. We have also recruited a number of excellent replacements. But most importantly, we have survived. On behalf of the planning committee, I want particularly to thank the original delegates who have stayed with the project-- often at no small personal sacrifice. I remain confident that the time/energy investments will be justified.

* * * * * * *

And so, on to Calgary! As most of you know, our "host" is Douglas Lauchlan, President of Mount Royal College. He has been a member of the international planning group from the outset. We owe him, and, particularly, John Fisher of his staff, our special thanks for so generously making the resources of the College available to us.

* * * * * *

And a few final thoughts for today (and tomorrow):

> "In fact, it is terribly urgent that changingness become the central element and aim of American education. For so quickly does change overtake us, that answers, knowledge, methods, and skills become obsolete almost at the moment of their achievement. In the coming world, the capacity to face the new appropriately is more important than the ability to know and repeat the old."
>
> Carl Rogers

"And the more rapid the change, the harder it is to predict what will happen. Should the rate of change double during the next 30 years as compared with the last 30 years, as now seems quite possible, the shape of the year 2000 is less visible from today than today was from 1940, and that was hardly at all."

Clark Kerr

"The story of survival is the story of creatures who adapted to changes in their environment, not of those who merely objected to change. The dodo had no control over his lack of ability to survive."

Harold Howe II

"The fixed person for the fixed duties who in older societies was such a godsend, in the future will be a public danger."

Alfred North Whitehead

"The dominant philosophy in any age is always the one which is on the way out."

Benjamin Disraeli

"America is the only country ever founded on the printed word."

Marshall McLuhan

"The first step to wisdom, said Alfred North Whitehead 50 years ago, is to recognize that the major advances in civilization are processes which all but wreck the society in which they occur. The art of free society," he added, "consists first in the maintenance of the symbolic code, and secondly, in fearlessness of revision. . .Those societies which cannot combine reverence to their symbols with freedom of revision must ultimately decay, either from anarchy or from the slow atrophy of a life stifled by useless shadows."

Quoted by James Reston

". . .if an automatic typewriter is marketed that successfully takes dictation directly from the human voice, America might witness a faster dislocation of human labor than accompanied even the introduction of such technologies as the tractor or the computer."

James O'Toole

"To approach communication in the spirit of loving care, then, is to eschew any urge to 'reform' communication, to 'make it better' or, on the other hand, to escape it by lapsing into reverie concerning ideal communicative behavior. In contrast to these impulses, appreciation entails taking seriously the human encounters that comprise communication as it occurs around us."

Thomas S. Frentz, Lawrence W. Rosenfield,
and Laurie S. Hayes

And, lest we take ourselves too seriously.....

"The future lies ahead. And behind us lies, lies, lies."

Pat Paulsen

and

"If at first you don't succeed, try, try again. Then quit. No use in being a damn fool about it."

W. C. Fields

Development of Communication Resources Through An Experiential Future-Focused Role-Image And Function-Oriented Curriculum:

The Task of Communication Educators

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A Position Paper for Inter-Com '76
Calgary, Alberta, Canada
August, 1976

As we participate in future planning one of our critical societal concerns is the utilization and development of our resources. This concern has been enhanced due to our sudden awareness of shortages of natural resources, fear of the inability to continue to maintain our present standards of living without the resources, and sometimes conflicting goals achieved by the development of different resources. In adapting to a future of rapid change, effective utilization and development of resources must be a carefully planned goal for maintenance and development of human existence.

In "Issues in Communication Planning for Hawaii," Barber, Grace, Harms, and Richstad refer to "communication as a resource," and state "the resources are the stuff we use to satisfy, meet, or serve needs."[1] Indeed, support for this view of communication as a resource is found in several writings which recognize that many human needs are fulfilled by interpersonal communication. Watzlawick, et al., proclaim that communication is necessary to confirm self-identities, an action which is necessary to maintain emotional stability.

> It seems that, quite apart from the mere exchange of information, man has to communicate with others for the sake of his own awareness of self, and experimental verification of this intuitive assumption is increasingly being supplied by research on sensory deprivation, showing man is unable to maintain his emotional stability for prolonged periods in communication with himself only.[2]

Thus, one human need which is fulfilled by human communication is confirmation, the recognition and attention given a person which may help that person to value him/herself as an individual. Such confirmation may result in satisfying an individual's need to be included in interaction with another person.

Once humans are included in an interaction, they have varying needs to control and/or be controlled, and display and/or receive affection, according to William Schutz.[3] Control in relationships refers to the direction and

dominance of the relationship by an individual. Affection refers to the emotional closeness which exists between the people. While the need to recognize and/or express control and/or affection within the relationship varies depending upon the specific nature of the relationship, communication is the means through which expressions of control and affection are transmitted either explicitly as part of the verbal content or implicitly as the relational (or feeling) message.

Thirdly, verbal, nonverbal, print, visual, oral communication provide the means for gathering information on which decisions are based. In the most extreme way of thinking, humans are constantly making decisions as we consciously or unconsciously process each bit of information. When decisions are important to us, such as deciding to change jobs, the gathering and evaluating of information and subsequent choosing between or among options becomes extremely apparent. The need to decide what action to take is important and communication is the tool used to gather other people's opinions, facts about the situation, speculations about the future, etc. Thus communication is the resource used to satisfy the human need for information on which to base a decision.

A fourth need is to satisfy what the Michigan Department of Education calls Life-Role Competencies--"competencies which the citizens of Michigan feel are necessary for an individual to function effectively in the four life roles [of] . . . employment, aesthetic-humanistic appreciations, personal-family managment, and civil and social responsibility."[4] Communication skills coupled with other skills are necessary to function in each of these roles.

Specifically, it is necessary for people to be able to process various types of information to function in these roles. G. R. Miller and Mark Steinberg in Between People state that people make predictions about other people and situations on the basis of cultural, sociological and psychological levels of informa-

tion, and that to create effective messages people need to be able to process information from all of these levels.[5] Within the contexts of the four life-role competencies people need to be able to utilize information from all of these levels depending upon the situation and nature of the relationship in which people are engaged. Some of the life-role competencies, such as family interaction, most effectively may be conducted through the use of psychological level information which leads to interpersonal communication. Other life-role competencies, such as civil responsibilities, most effectively may be fulfilled through use of sociological or cultural level analyses, or, what Miller and Steinberg call, noninterpersonal communication.

Thus, communication can fulfill the human interpersonal needs of confirmation of identity, control and affection within a relationship, information processing as a basis for decision making, and development of life role competencies.

However, as we view the future, our rapidly changing world is characterized by an increased dependence on mass media technology. As G. R. Miller indicated,

> Achievement of a harmonious, healthy coexistence between the system of human communicators and the technological systems of mediated communication consitutes one of the most critical, perplexing communication problems that must be faced in the third 100 years.[6]

Problems posed by an increased dependence on mass media include (1) a reduction of interpersonal interactions, (2) increased information bombardment and overload, and (3) a focusing on stimulus generalization. When these problems are considered in light of human needs the strain between interperonal communication resources and mass media resources are illuminated.

The potential reduction of interpersonal interaction caused by an increased dependence on mass media is already evident in the vast amount of time people

spend watching television, for example, as opposed to talking with friends and neighbors for entertainment. Similarly, the use of the television and radio for obtaining news as opposed to getting news via word-of-mouth suggests a reduction in interpersonal contact. Coupling the increased used of mass media technology with the trend toward higher mobility indicates increased maintenance of interpersonal contacts over time and distance via telephone conversations, exchange of tape-recorded messages, mail, etc. Such reduction of interpersonal contacts makes it more difficult to confirm the identities of others or to be confirmed. Similarly, relational messages of control and affection are more likely to be distorted or misperceived when transmitted via mass media. In extreme cases, persons who depend upon television and radio for stimulation may be depriving themselves of the human interaction necessary for identity confirmation, affective response, and control. While the receiver may be able to control the media by turning the TV on or off, it is difficult to imagine the person giving the TV affection or confirmation or feeling rewarded by confirmation or affection he/she imagines from the TV. Clearly, the mass media technologies, although communication resources, are unable to fulfill the human needs which interpersonal communication allows.

It is no longer possible for us to store, process, or retrieve all the information which is instantaneously and constantly being produced and disseminated via the media. Managing the information system is a critical function in the future-shocked world of rapid change, for as Berlo indicates,

> it is clear that in an interdependent and symbol-centered society, he who controls the communication system controls the society.[7]

Again the conflict rages between the mass media resource and the human resource, for humans need information to improve their decision-making but must learn to control the technology which transmits, records, processes, and retrieves the information. Mastery of information generally yields control of the situation,

interaction, or decision-making, and thus, a power-struggle among those who choose to conquer the technology is inevitable.

Finally, mass media technology as a resource which fulfills informational needs also creates interpersonal problems by (1) creating messages for a mass audience which is analyzed for its homogeneous qualities and (2) portraying people and situations in stereotyped, generalized manners. As G. R. Miller states,

> By their very nature, the mass media cater to cultural and sociological stereotypes; they largely sacrifice the many uniquenesses and idiosyncrasies of individuals at the altar of shared cultural norms and commonly held role prescriptions.[8]

As previously stated, for people to fulfill life-role competencies they must learn to make predictions on the basis of cultural, sociological, and psychological information so they can appropriately function on the interpersonal and noninterpersonal levels. If people recieve most of their information from the mass media which is utilizing primarily noninterpersonal data and directing messages on the noninterpersonal level, the receivers will be limited in their ability to function on the interpersonal level--and subsequently to fulfill all of the needed life-role competencies.

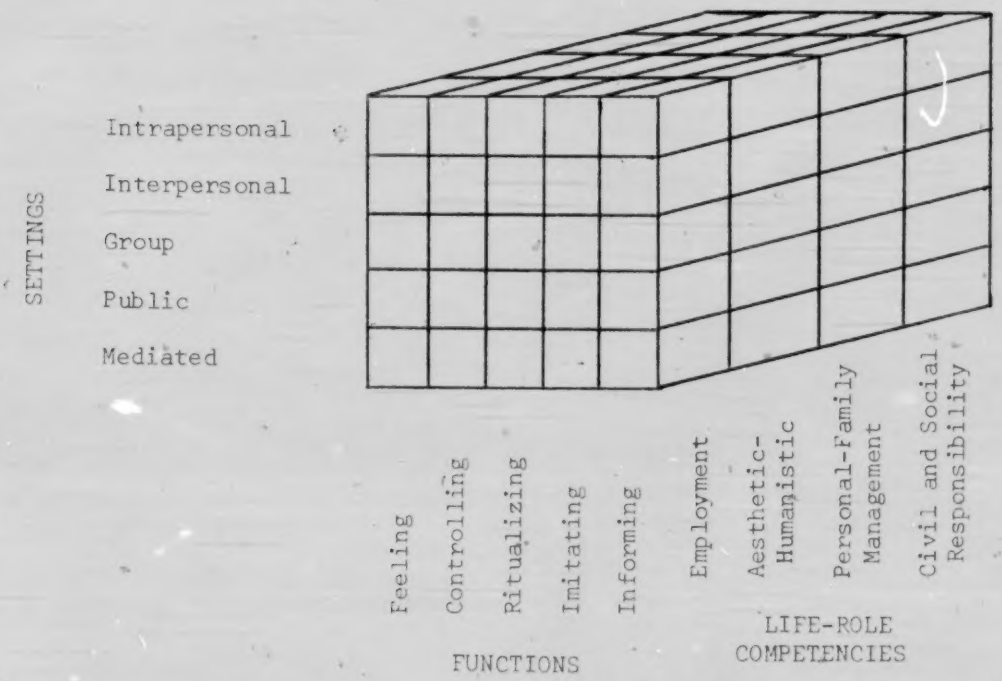
Given the conflict between mass media resources and interpersonal communication resources, the key question which must be addressed is

> "How can we develop the communication resources required to satisfy our communication needs?"[9]

The broader question of "what can educators do to insure that the young will acquire communication competencies needed to function in a rapidly changing world?" will be considered in the response to the first question.

Regulation of mass media messages is among the appropriate responses to the key question of developing resources. However, the focus of the rest of this paper will be on developing interpersonal communication resources through

a planned K-12 curriculum. Such a curriculum must promote the attitude that fulfilling human needs through interpersonal communication is both necessary and desirable. In general, this K-12 curriculum should provide experiences, role-models, and reinforcement for communication skills and roles (1) in intrapersonal, interpersonal, group, public, and mediated settings, (2) regarding the life-role competencies of employment, aesthetic-humanistic appreciation, personal-family management, and civil-social responsibility, (3) for purposes of expressing feeling, controlling, ritualizing, imitating, and informing.[10] In essence, this curriculum should provide experiences in each of the relevant cells of the model drawn below.



This curriculum should provide EXPERIENCES for students through real, simulated, role playing, or vicarious means (i.e., read about in books, view on television or films) so that insights about the various communication settings or functions and related life-role competencies could be gained. Alternative behaviors should be explored and the merits and problems of the options experienced and/or discussed. Students should learn to consider the various components interacting in the situation and make predictions on the basis of their assessment of the available data which option would optimize the opportunity to effectively obtain their desired outcome. Students should select and enact specific behaviors and then evaluate the results. Criteria for assessing the results of their actions should be explored and created. In other words, students should systematically learn to consider various behaviors before selecting and performing the "best" choice and then should evaluate the behavior and actual results in light of the desired outcome. (Research on the developmental acquisition of these communication skills among children conducted by Jesse Delia and Ruth Anne Clark indicates that children's ability to enact these skills increases with maturity.[11]) Such an approach to learning communication skills should reinforce the (1) process nature of communication which is dependent upon the interaction of many variables within the system and (2) importance of flexibility and adaptability of behaviors given different combinations of variables.

Implementation of this curriculum in early elementary education should allow teachers to guide students into experiencing what Benjamin Singer calls a "FUTURE-FOCUSED ROLE-IMAGE"--the self-image projected into the future.[12] For the purpose of helping children to learn to adapt and build healthy-confirmed identities and to set and strive to fulfill personal goals is an interpersonal need worthy of attainment. As Singer said,

> The future-focused role-image varies--among persons, among social classes, among societies. It is especially important to search for its components and explain its mechanisms during a time such as this: a time of great flux, of increasing tempos, a time when our social milieu changes rapidly, as organizations disappear and emerge and roles are transformed, created and disappear, seemingly unpredictably.[13]

Adaptability and a future-focused role-image are interpersonal communication concepts which should help students face the world of rapid change, for as Singer points out, "the development of a future-time perspective early in life provides both a motive and a means for achievement in the future."[14] Specifically, children should be encouraged to imagine themselves in various life-roles and should explore their feelings and communication behaviors (ritualizing, controlling, informing, etc.) in those roles to project their desire to potentially fulfill similar roles in their lives. Students should be encouraged to reject some roles, while developing communication expertise in others. By providing children with opportunities to project into the future, teachers should be motivating students to gain certain competencies in the present to enable them to achieve the goals later. This future-orientation should assist children in (1) developing positive self-concepts with "I think I can" attitudes, (2) creating and responding to various relational messages of control and affection within the roles, (3) encoding and decoding messages necessary to the decision-making processes within each role and (4) more adequately fulfilling the life-role competencies. Thus, development of the resource of communication is critical in helping students to satisfy human needs and consequently to cope with the future-shocked society.

As with the efficient development and utilization of any resource, planning, cooperation, and coordination are important. Thus, communication educators must (1) continue to research the functions, settings and developmental acquisition of communication skills, (2) develop coordinated communication

curricula from kindergarten through secondary and college education, and (3) convince administrators and communities of the importance of developing communication research and curricula in an effort to satisfy interpersonal needs now and for the future. If communication is a resource and is used to satisfy human needs, then we must gain more knowledge about the resource and its potential uses, and must teach others to efficiently and effectively use the resource. Indeed, communication educators must assume the future-focused role of communication resource developers.

Footnotes

1. Richard Barber, Donald Grace, L. S. Harms, and Jim Richstad, "Issues in Communication Planning for Hawaii," An Occasional Paper of the Hawaii Research Center for Futures Study, Social Sciences, and Linguistic Institute, University of Hawaii, 1975, p. 3.

2. Paul Watzlawick, Janet Helmick Beavin, Dan D. Jackson, Pragmatics of Human Communication: A Study of Interactional Patterns, Pathologies, and Paradoxes (New York: W. W. Norton & Co., Inc., 1967), pp. 84-85.

3. William C. Schutz, FIRO: A Three Dimensional Theory of Interpersonal Behavior (New York: Holt, Rinehart, Winston, 1958).

4. State of Michigan Department of Education, "Life Role Competencies," unpublished manuscript, Lansing, Michigan, 1976, p. 1.

5. Gerald R. Miller and Mark Steinberg, Between People: A New Analysis of Interpersonal Communication (Chicago: Science Research Associates, Inc., 1975), p. 12.

6. Gerald R. Miller, "Communication in the Third 100 Years: Can Humanity and Technology Coexist Peacefully?" in C. David Mead (Ed.), Life in America in 2076 (East Lansing, Mich.: Michigan State University Press, in press), p. 7.

7. David K. Berlo, "The Context of Communication" in Gerhard J. Hanneman and William J. McEwen (Eds.), Communication and Behavior (Reading, Mass.: Addison-Wesley, 1975), p. 13.

8. Gerald R. Miller, op. cit., p. 18.

9. Barber, et al., op. cit., p. 4.

10. These five purposes or functions were defined by Ronald R. Allen as part of the Speech Communication Association National Project on Speech Communication Competence, 1975.

11. Jesse Delia and Ruth Anne Clark, "Cognitive Complexity, Social Perception and Listener-Adapted Communication in Six-, Eight-, Ten- and Twelve-Year Old Boys," unpublished manuscript, University of Illinois, Urbana-Champaign, Illinois, 1975.

12. Benjamin D. Singer, "The Future-Focused Role-Image" in Alvin Toffler (Ed.), Learning for Tomorrow: The Role of the Future in Education (New York: Vintage Books, 1974), p. 21.

13. Singer, op. cit., p. 22.

14. Singer, op. cit., p. 25.

Cassandra L. Book, first and last volume published by Allan and Florence Book, passed through the hallowed educational halls of Kankakee, Illinois. Through several summers of organized camping experiences she learned to love the out-of-doors and many sporting and recreational activities, especially tennis and all water sports. Once at MSU she became an avid Spartan fan, sorority member, and speech education major. During her speech education methods course in her junior year she became a communication convert and set the goal of writing a high school textbook which would approach speech from a communication perspective. Little did she realize that that dream would become a reality in a few short years while working on a master's degree at Northwestern under the guidance of Kathleen Galvin. Inspired by the excellent teaching of Dr. Galvin, Cass knew she too must get into the classroom and finally landed a job at Univ. of Wisconsin-/Whitewater where she was allowed to spread her wings and fly! That year of college teaching experience convinced her to pursue a doctorate and the warm reception of Gus Friedrich, Bill Brooks, and Ralph Webb gave her the catalyst to enroll at Purdue. As the Ph.D. eventually became within reach, a new dream arose: that of returning to her alma mater, MSU, to teach. Again her dreams were realized when the Communication Education methods and director of the basic course position became hers and she was torn from the womb of Purdue with only an A.B.D. A year and a half of on-the-job challenge, re-orientation, and work finally paid off in both a Ph.D. and a comfort in becoming an Assistant Professor of Communication. While she enjoys her job and the students with whom she works, in her own words, "she'd rather be sailing." End of Book report.

Research on Teacher Behavior in Classroom Interaction: A Position

Gus Friedrich--Purdue University

Aristotle, one of our foremost taxonomists, sounds reassuringly puzzled and modern as he surveyed the education of his time and commented:

> It is clear then that there should be legislation about education and that it should be conducted on a public system. But consideration must be given to the question, what constitutes education and what is the proper way to be educated. At present there are differences of opinion as to the proper tasks to be set; for all peoples do not agree as to the things that the young ought to learn, either with a view to virtue or with a view to the best life, nor is it clear whether their studies should be regulated more with regard to intellect or with regard to character. And confusing questions arise out of the education that actually prevails, and it is not at all clear whether the pupils should practice pursuits that are practically useful, or morally edifying, or higher accomplishments--for all these views have the support of some judges . . .

Perhaps education, because of its close ties to the emotive ideals and desires of society, must always be characterized by the imprecision of its stated goals and its methods for pursuing them. And perhaps it is the vigorous debates produced by this ambiguity that leads to educational innovation and, occasionally, improvement. If so, it will not be productive for us to limit our Calgary deliberations to prescribing rigid or absolute answers to the question: "What can teachers and researchers do to help insure that the young will acquire the communication competencies needed to function in a rapidly changing world?" Even if we could reach agreement--a doubtful proposition--we can better spend our

time identifying alternative ways of answering such questions and the criteria by which our answers can be evaluated.

That said, let me outline my prejudices concerning an area of research that relates to the conference topic and that particularly interests me--the area of teacher behavior in classroom interaction. Specifically, I am concerned with the impact of teacher behavior on students' acquisition of communication competencies.

Research on the topic is of relatively recent origin. I doubt if many of us, in the process of preparing for teaching careers, read so much as one research report on teaching behavior that influenced our teaching patterns. For most of us, such patterns were (Walker and Travers, 1963):

1. derived from teaching traditions (e.g., we teach as we were taught)
2. derived from social learnings in our background (e.g., we reinforce the behavior of pupils so as to develop a middle-class ideology)
3. derived from philosophical traditions (e.g., we teach in accordance with the Rogerian or the Skinnerian tradition)
4. generated by our own needs (e.g., we adopt a lecture method because we need to be self-assertive)
5. generated by conditions existing in the school or community (e.g., we conduct our classroom in such a way as to produce formal and highly disciplined behavior because this represents the pattern required by the principal)

Because of dissatisfaction with such "hit-and-miss" methods, scholars in the late forties began to focus their attention on ways of structuring the classroom environment in such a fashion as to minimize the impact of teacher differences and maximize student learning: discussion was compared with lecturing; programmed instruction with simulation and games. Current entries in this educational game include comparing token

programs to the Keller Plan (PSI) and mini-courses to contingency contracting. Predictably, in retrospect, because it ignored the complexity and dynamics of the classroom environment, a great deal of research failed to discover one approach superior to others for any grade level. Dubin and Traveggia, for example, after reviewing ninety-one studies, suggest: "These data demonstrate clearly and unequivocally that there is no measureable difference among truly distinctive methods of college instruction when evaluated by student performance on final examinations."

As such evidence continued to accumulate, researchers in the sixties began to isolate and examine elements of teaching behavior which could be used to compare various methodologies isolating well over one thousand such variables. For example, level of question asking is a variable appropriate to both discussion and programmed instruction. While such an approach is in its infancy, it is already producing worthwhile results. Rosenshine and Furst, for example, have identified nine variables which yielded consistent results across the fifty-odd studies in which naturally occurring teacher behavior was related to measures of student growth: (1) clarity, (2) variability, (3) enthusiasm, (4) task-oriented and/or businesslike attitude, (5) criticism, (6) teacher indirectness, (7) student opportunity to learn criterion material, (8) use of structuring comments, and (9) multiple levels of questions or cognitive discourse.

While these variables may seem obvious, if not trite, it is worth observing that a number of other virtuous sounding variables have not correlated well with student achievement: for example, nonverbal approval

(counted), praise (counted), warmth (rated), the I/ratio, or ratio of all indirect teacher behaviors (acceptance of feelings and ideas, praise and questions) to all direct teacher behaviors (lecture, directions and criticism) (counted), questions or interchanges classified into only two cognitive types (counted), student talk (counted), and student participation (rated) (Rosenshine and Furst).

Unfortunately, systematic observation research is time-consuming, thus slow in accumulating. And much of it is badly flawed by sterile definitions of teaching and achievement and by fundamentally weak research design. Rosenshine, for example, was able to locate only fifteen studies in which teachers were trained to teach a class of students in a specific manner, observational measures were collected to verify that teachers behaved as intended, and end-of-experiment measures (such as achievement scores) were obtained.

Fortunately, these flaws can be remedied. Communication scholars are conceptualizing and executing sophisticated, systematic research programs on other communication variables and the tools they use are easily translatable to the study of teachers' communication behavior. The benefits to be derived from directly observing teachers and pupils as they interact inside classrooms make such an effort necessary and worthwhile.

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A Position Paper

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Given all of the changes which have taken place in the original Inter-Com '75 proposal, I feel it essential to express a number of questions with regard to the upcoming conference. Especially since we are no longer meeting in Great Britain with the full international scope once envisioned, and since we will not have the services of expert consultants as planned, perhaps we need to rethink the breadth of the task of the conference. We may decide to deal with a less complex theme, one which may be handled more productively under the present circumstances. Indeed, possibly a shorter intensive meeting would be more efficient than a ten-day conference.

It is my conviction that this conference should provide specific proposals for action, not just suggest the appointment of additional task forces and the like, and that these proposals should be realistic and achievable. Too often conferences produce reports which consist of interesting and thought-provoking papers and recommendations about which little if anything is ever done. Our educational system is today in such dire straits with respect to communication education that we do not have such liberty of time. We need to concentrate on the immediate problems, or there may be no viable future for our educational system as we know it. Let me share with you some of my concerns.

We have been told in various recent nationally publicized studies that as many as 50% of American adults cannot function verbally with sufficient comprehension to be able to read and understand the directions on a Campbell's soup can. At my own university, over one-half of all incoming students are by testing placed into one or more components of a remedial language program, the espoused goal of which is to bring their skills to the ninth grade level. All along the line our educational system has failed measurably to teach even the minimal communication skills needed to function in today's society, to say nothing of that of the future as it becomes increasingly complicated and demanding. National test scores such as the verbal SAT underscore the startling decline in the quality of instruction in communication skills and understandings.

Violence pervades our classrooms, not only in the large urban areas but throughout the country. Senator Birch Bayh, chairing the Senate Juvenile Delinquency Subcommittee, reported appalling statistics from some 750 school

districts across the nation: more money is spent on the aftermath of vandalism than on textbooks for the entire country; within the schools themselves, since 1970, crimes of violence -- murders, rapes, serious physical assaults on teachers, aggravated assaults by students on other students, and armed robberies -- have increased from approximately 20% to 85%, depending on the crime.[1]

Teachers and students alike view many of our high schools as retention centers rather than as places of learning. At this moment the Philadelphia school system is instituting an "alternative" school which will focus on teaching basic skills, discipline, and self respect; enrollment in this school will be voluntary and limited. If this is an alternative, one may well imagine the nature of the "regular" school situation.

School districts, like cities, are in desperate financial condition. Next year, if all goes well, the Philadelphia school system will be only $100 million in the red; at the same time, the Chamber of Commerce has reported that tens of millions of dollars are wasted annually because of "unnecessary employees, ineffective cost controls, confused organization, and badly negotiated contracts."[2] And surely Philadelphia is not alone among cities and suburban areas in our troubled land.

The dearth of instruction in intercultural and cross cultural communication for teachers and thereby for students is disturbing, even dangerous. The continuing violent opposition to de facto racial integration of students in our schools is a frightening social phenomenon with unexplored educational implications. Moreover, conflicting reports about the results of integration, such as those of Coleman and others, raise serious questions with which we have not really begun to grapple.

Federal and state governments seem to be abdicating fiscal and other responsibility for the growth and development of our children. For all the high minded intentions and initial achievements of programs for upgrading the education of the "disadvantaged," such aid has been drastically cut back and/or diverted in recent years. At the same time, measures of the effectiveness of such innovations offer little conclusive information.

Having been involved in secondary school classrooms and curriculums for nearly two decades of my professional life, I am continuingly distressed by the state of affairs with respect to communication education. A few years ago I conducted an intensive examination of the teaching of literature in secondary

schools, reviewing all of the major textbook series and published curriculums from various states and individual school systems. Although this aspect of the communication program is not of primary interest to our conference, the results of this investigation are relevant, because my own experience and that of others indicates that the same conclusions can be applied to virtually all aspects of communication studies. The findings indicated tradition bound attitudes of teachers and administrators, with unwillingness to innovate; extremes of subject centered programs for the college bound, adjustment centered programs for other students; too ready acceptance of curriculums from publishers or other systems without proper adaptation and research; lack of significant and ongoing appraisal of programs; fragmentation of subject matter, with a lack of integration in planning a K-12 program which will dovetail into higher education; continuing problems of financing; lack of preparation of personnel for adequate research and handling of new materials; materials chosen for moral content, to reinforce traditional American middle class values; stress on learning of content rather than critical response; curriculums based on outdated guides, dicta from central offices, publishers' series, or a laissez faire policy; inadequate time, materials, and direction for teachers to work on organization and development of curriculum, if they were involved at all; attempts to meet individual skill and ability differences largely by homogeneous grouping; audiovisual and library resources outdated and of poor quality, limited by lack of funds and staff; objectives of programs vague and abstract, if stated at all.

Writing in 1966 with respect to the development of school curriculums, Jerome Bruner observed,

> The materials , in short, have got to be made usable and attractive not only to the highly gifted teacher, but to teachers in general . . . . It was Dante, I believe, who commented that the poor workman hated his tools. It is more than a little troubling to me that so many of our students dislike ... . the conscious deployment of their native language . . . I should hope that in the new era that lies ahead we will give a proper consideration to making these tools more lovable. Perhaps the best way . . . is to make them more powerful in the hands of their users.[3]

The ways in which textbooks and curriculums are designed and written all too often ignore recent knowledge about children's learning patterns. In an invited address to the APA in 1975, noted developmental psychologist David Elkind argued that teachers deal with not one curriculum but three:

> the developmental curriculum, the complex of abilities and knowledge that children acquire more or less on their own in order to adapt to their world; . . . . the school curriculum proper, the body of information accumulated and recorded by mankind over the centuries and which it is the prime function of the schools to transmit; . . . . the personal curriculum . . . the child's own hierarchy of needs, interests, values, and attitudes that determine his willingness to participate in the activities of the school.[4]

Elsewhere, Elkind has described the school curriculum as frequently being "a precipitating, if not a predisposing cause, to many school related emotional problems."[5] He observes,

> Why are the curricula so bad? . . . there is one overriding reason. Basically. . . curricula are not field tested before they are published and sold to the schools . . . there is no way, on an a priori basis, that you can predict or gauge children's reactions to materials. What seems simple to the adult is generally complex to the child . . . . the learning disabled child is but one subcategory of curriculum disabled children. I think children can become curriculum disabled not only by being daily confronted with confusing and contradictory materials, but also by being taught a skill which they do not as yet have the cognitive abilities to master. This, I believe, is one of the major reasons we have so many reading problems in this country.[6]

It should be very helpful to the participants in Inter-Com '76 to have the findings of the National Project available for consideration, as mentioned in one of our recent communications. But I am not at all sure how Inter-Com '76 can "serve as one means for testing and validating the developmental guide," as noted in that communication.[7]

The Report of the Memphis Conference makes several references to the need for interdisciplinary research and interaction. Perhaps we will in some way be able to contribute to meeting that need. But I must admit that my hopes are not high; I have serious doubts about the willingness of related organizations to participate in such interdisciplinary activities. For example, in March of this year I was asked to serve as parliamentarian for the business meeting of the Conference on College Composition and Communication. With all due respect to my colleagues in that organization, I was distressed at the apparent unwillingness of the group to confront the troubling realities of the present situation with regard to the improvement of the teaching of communication. The representatives defeated a resolution requesting a response to the "literacy crisis" as described in Newsweek and elsewhere, defeated a resolution recommending the preparation of teachers in courses relating to the languages and cultures of American

ethnic minorities, and defeated a resolution calling upon the organization to prepare and disseminate a description of the characteristics of effective writing for use in teaching the "basics." This refusal to act becomes much more disturbing when we recognize that the theme of the conference was "Back to Basics."

The observations offered here have barely touched on some of the crippling problems facing our society's educational system. Education for improved communication in the future is inextricably tied to these problems. Attempting to deal with "communication competency" isolated from the context in which it must occur seems to be an exercise in futility. Thus, as suggested at the outset of this paper, we may well consider narrowing, even redefining the task orientation of Inter-Com '76. Frederick B. Routh of the U. S. Commission in Civil Rights has observed that any agency seeking social change should begin by identifying six fundamentals: its goal, audience, situation, timing, medium, and capacity.[8] Such an outline may be seen as offering potential guidelines for our deliberations.

Quite likely I have sounded as if I were delivering a Jeremiad on the future of American education. Not true! I have great faith in and hope for the future of our system, but I am no longer very idealistic about it. I do not think we can afford to be. Too much remains to be done -- let's get on with it!

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[6]Ibid., pp. 3-4.

[7]William Work, "Inter-Com '76: An International Educational Project of the Canadian Speech Association, the Society of Teachers of Speech and Drama (U. K.), the Speech Communication Association" (Falls Church, Va.: SCA, 1975), p. 6.

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FUTURES OF HUMAN COMMUNICATION: I

by

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1.0 Introduction

We had seen an "earthrise" a few months before that moon day in July, 1969 when Neil Armstrong took his now historic small step for a man that was also a giant step for humankind. More than a quarter-billion of us, still earthbound, saw him take that step and heard him forecast its significance. One of the four billion of us, by the temporary accident of presidency, was priviledged to pick up his phone and talk with Armstrong as the rest of us listened in on a global party-line. We saw; we heard; we were there as the dimensions of human communication were radically, fundamentally, and irreversibly changed.

Early in 1972 a small group of us met in Hawaii to consider the changes in communication we sensed were underway. We were interested in the areas of communication technology, population communication, and communication in the future and the common issues and concerns that united those areas. During the course of that conference on world communication, as we were to call it, a major theme emerged. That theme incorporated a number of still fresh concepts such as feedback, interaction, two wayness and transceivers.

In his conference summary, Lerner remarked:

> "For most of the forty years we have been doing modern communication research, we have operated with a paradigm invented by Harold Lasswell around 1930 which ran: who says what to whom through what channel with what effect. . . . Right from the very beginning of this conference that paradigm was put aside and dimension by dimension a new one began to emerge. . . . Where the initial Lasswell formula might well be reversed and that . . . 'Who is talking back to who talked to whom' . . . is the main thing we ought to be looking at." (Lerner in Richstad and Harms, 1973)

A few months later Harold Lasswell was at the East-West Center speaking on the futures of world communication. In his distinction between oligarchic and participatory communication, Lasswell himself seemed to be speaking for a new paradigm. (Lasswell, 1972)

In a broader context Kuhn, in his discussion of scientific revolutions, asserts that the transition from one paradigm to another paradigm signals a shift from normal science to revolutionary science. More specifically, Kuhn states:

> "Confronted with anomoly or crisis, scientists take a different attitude toward existing paradigms, and the nature of their research changes accordingly. The proliferation of competing articulations, the willingness

> to try anything, the expression of discontent, the recourse to philosophy and to debate over fundamentals, all these symptoms of a transition from normal to extraordinary research." (Kuhn, 1970)

In these days of future-shock, I assume we are in agreement that we are involved in a communication revolution. It follows, then, that we will need to think in extraordinary ways, do extraordinary research, and communicate extraordinarily well with each other.

2.0 Possible Research Areas

Some of the descriptors of a "post-Lasswell" paradigm for human communication are: participatory, two-way, cooperative, interactive and purposeful. It is convenient to consider such communication as occuring within organized communication systems that operate within one of two world communication networks. Within the domain of human communication, the balance between information processing and communicative association (or interpersonal relationships in human contact) appears critical (see Harms, 1974).

Within this general framework, there are several possible research areas basic to the long-range future of human communication. In particular, I will consider world communication networks, some novel communication systems, and the Right of Everyone to Communicate.

2.1 Two World Communication Networks

To visualize the dimensions of our planet, it is helpful to "construct" a mercator-type mosaic about 200 square million miles in size--the approimate surface area of earth. About 140 million square miles are water-covered. Just under 60 million square miles are "dry" land (McHale, 1972). On this mosaic, imagine each dot to represent one human. In 1800, there were one billion human dots; in 1976, 4.0 billion; and, in 2000, more than 6 billion are expected.

Imagine for the moment that it is dark across the entire surface of our earth-sized mosaic, say 0400 SWT (Single World Time), and all of the human dots are in their home "households" fast asleep. An hour later, at 0500 SWT, the world awakes and the activities of the day begin. Assume that all of those activities--the various traffics--leave visible traces on the surface of our earth-sized mosaic.

At 1100 SWT of the following day, we examine the location of our human dots. Worldwide, a substantial percentage remain in their home "households," but there are strong variations in this pattern from community to community and region to region. Most importantly, millions of new clusters of dots will appear on our

mosaic. The activities and traffics across the face of our mosaic form a bewildering array of patterns, so let us single out two for attention.

The first of these global patterns is traced by people on the move (information bearers) from their households to both nearby and distant destinations for variable periods of time, but most often to destinations of less than 50 miles from home for a period of less than 10 hours. The heavy lines in this pattern reveal the major roadways in urban communities that link the outlying households to the center of the city. But there is another set of traces that lead to the nearby airport, and that airport is a node in a world air transportation network. The traces from airport to airport outline the world air routes. The household garage and automobiles, the local roadways leading to the center of the city and to the local airport, the airport itself, the air routes and the planes together constitute the major elements in a world transportation communication network. The big jet is an appropriate symbol.

A second global pattern is traced by the movement of messages between humans, for the most part, while they are in their daytime mosaic formation. While postal service, telegraph and so on contribute to this pattern, the telephone use (and subsequently, broadband cable) patterns reveal the real-time networks that now link and will continue to link human communicators in the future. Again, as in the case of transportation, most of the telephone traffic arises from "within-community" message interchange. But as the long links become available they are put into use. The communication satellites make more channel capacity available and that capacity is essentially independent of distance. The communication satellite symbolizes the world telecommunication network.

There now exists two world communication networks. For many purposes of human communication, these networks are <u>interchangeable</u>. For purposes of information exchange, telecommunication often saves enough transportation time to make it preferred, as when you phone your stockbroker to buy or sell, or inquire about a particular transaction. For purposes that emphasize communicative association (interpersonal relationship), transportation may be preferred to telecommunication; even Ma Bell advertises that a phone call is only the "next best thing to being there." <u>If</u> telecommunication is the next best thing to being transported "there," we need to know how great the difference between best and next best is, and the variation in preferences among people on this point.

A few years ago Pierce suggested that in the future, a human would be able to live where he/she liked and telecommunicate to work. The transportation facilitated "closed" university contrasts with the telecommunication facilitated "open"

university. The transportation dependent tourist who flies to a distant city and rides through its streets in a tour bus that provides a "3-D view" may experience essentially identical experience in his own living room with 3-D TV. Thus, in business, education, and tourism telecommunication network capacity can be traded for transportation capacity--to some extent, some of the time.

For a major telecommunication/transportation trade to occur, households would require home communication terminals. These terminals would be connected by broadband cable to community cable centers. Such centers would also contain advanced communication technology for group use, and a satellite ground station. Thus, every communicator could remain in his household and employ a home communication terminal, and go to a nearby "communication work center," as in some of the new towns in England and Japan, or on occasion, transport himself to work, or school, or travel as in the good old days.

Home communication terminals, and local community communication plazas would be expensive, at least at first, and in particular when compared to present day telephone, radio and television. The more useful comparison, however, would be with the second private car, or with the cost of a new mass transit system. In fact, the second car provides a convenient vehicle for bringing about a tele/trans trade. Heavy taxes on second cars could be used to subsidize development, installation and use of home communication centers. And/or, instead of diverting gasoline taxes from highway to mass transit construction, we might get at the root of the problem by diverting tax resources to "electronic" highway construction, that is, to broadband cable facilities.

Given the existing telecommunication technology and some additional hardware that will soon be available, a variety of telecommunication sub-networks could be designed for any community. Suitable features can be built into the home terminal, for instance, two-way audio visual, hard copy printouts and interactive computer capacity. But as such telecommunication facilities come into use, a critical research question arises. To what extent would humans use these telecommunication facilities in preference to the transportation facilities. Will office workers and students and tourists, for example, stay at home and telecommunicate enough of the time to relieve crowding at the center of the city of the type that occurs in Tokyo Station at rush hours. Certainly, tax incentives and educational programs and other devices could be employed to make the telecommunication option attractive. But at the fundamental level it is a question of human need for communication and in particular the relationship between the not always compatible human requirements for information and association and privacy.

Let us look at ourselves for a moment. Those of us in this room have transported ourselves here at some cost in time for purposes of communication. Had each of us remained at home and telecommunicated to this conference, would the outcome of the conference have been different? In the future, can we specify a telecommunication/transportation ratio for the individual, for the community, or for mankind? The question can be re-phrased within the framework of the global mosaic. To provide the necessary diversity and variety in human communication, to what extent must the day mosaic differ from the night mosaic? And what are the required network linking capacities?

As we develop world communication networks a major new set of possibilities awaits us. Sagan speculates that there now exists an interstellar telecommunication network and that within a century, perhaps this century, our earth telecommunication network will interlink, become part of, that interstellar network. Clarke speculates in a similar vein about an interstellar transportation network. Earthmen have been to the moon and back. Skylab may come to serve as a skyport for an interstellar transportation network. Teleportation awaits us at some future time as well. (Sagan, 1973; Clarke, 1972)

2.2 Comparative Communication Systems

We humans, in defining ourselves to others of our species, stress that it is our unique capacity for communication that sets us apart from and places us above the other members of the animal and machine kingdoms. We examine our communication capacities, and conclude that we are intelligent (Sagan, 1973). We briefly examine communication among members of other species and, more often than not, conclude they are not intelligent, or are of such low intelligence as to be uninteresting.

In the few cases where we have attempted interspecies communication, we have tried to train an animal to communicate with us as we assume human children learn to communicate (Sebeok, 1968). Vicki, a chimpanzee, lived with a human family for six years and learned four English words. Washoe, another chimp, in less than six years has learned more than 500 signs of the type employed by deaf humans. So apparently have her normal-hearing human co-communicators. Even a sligh adaptation on the part of the human communicator has made the chimp appear to us to be much more intelligent (Gardner and Gardner, 1969).

The same story seems to be unfolding in human-dolphin attempts to communicate. Lilly becomes eloquent in describing the advantages we humans would experience if we are able to cooperate with the dolphins in building an interspecies communication system (Lilly, 1967).

While we know painfully little about the nature of chimpanzee or dolphin intelligence, we presumably know somewhat more about artificial or machine

intelligences. Assume for the moment that this is the case. Man-machine communication appears to offer an opportunity for a clear examination of the information processing aspects of a communication system in which a human communicator participates. But as the interaction between man and machine more nearly approximates that of human-human dialogue, will some of the "human" characteristics, as the case of HAL in 2001, become evident in the machine. Man-machine communication increasingly is described in the descriptors of a post-Lasswell paradigm, that is, interaction, symbiosis, and synergy (Hormann, 1971).

If or when the speculations about interstellar communication networks transform into a sensible reality, we humans will then be faced with the prospect of establishing communication with the ETI (Extra Terrestrial Intelligences). At present, it seems probable that those ETI we might link with via an interstellar network might be ten or ten thousand times more intelligent than we humans are. And there is the curious possibility that the ETI might survey the earth, and by their definition, discover intelligent life in the computers because of their reliability in information processing or in the dolphins for the high quality of their inter-dolphin associations!

The possibilities just described will or might greatly expand the range of human communication options: man-machine, human-animal, earthman-ETI. In each of these cases, communication may be viewed as occurring in systems. Thus, the possibility of an area of research that might be called comparative communication systems opens up. Lilly, for instance, suggests that such an approach in human-animal communication would provide information useful for Man-ETI communication.

The city facilitates face-to-face, interpersonal human communication. Human contact, interpersonal relationships, or communicative association is presumed to be important. But a high percentage of office workers, for instance, spend an increasing proportion of their workday before terminals linked to a distant computer. How are other aspects of the work situation affected? The answer to questions such as this one probably forecast the degree to which telecommunication can be traded for transportation. The tele-trans trade is also to a major extent a centralized/decentralized, or an urban/rural trade.

2.3 The Right to Communicate

The Universal Declaration of Human Rights was passed by the United Nations General Assembly in December, 1948. Two of the articles in that Declaration bear on a post-Lasswell paradigm of communication. Articles state that every human has the right "to seek, receive and impart information . . ." Article 20 makes two

points about human association: every human has the right to join an association; no one can be forced to belong to an association. Jean d'Arcy has suggested that Article 19 needed to be revised and expanded into a full range Right to Communicate. As one examines d'Arcy's suggestion in the context of overloads and interrogations which are often part of city life, it is immediately apparent that there must also be for each human an equal Right Not to Communicate (d'Arcy in Harms, Richstad and Kie, in preparation).

When a communicator has the unquestioned Right Not to Communicate, certain requirements for community size and availability of alternate communicators come into focus. In a community of two and only two communicators, when one communicator elects not to communicate, the other communicator is unable to communicate. When we know more about human communication capacities and needs--both upper and lower limits or threshold ranges--we will begin to be able to specify minimal and maximum community sizes, and the appropriate telecommunication/transportation network ratios. In sum, an unquestioned Right Not to Communicate reaches to the center of community organization.

An increase in human population and an intensification of communication at the center of the city obviously makes a filter or protective device necessary for the human communicator. The unlisted home telephone number is one such protective device. The executive who is shielded by a phone answering, appointment-granting receptionist filters out many potential communicators. But these are awkward devices that do not identify the basic problems of capacity nor do they develop widely useful procedures for dealing with them.

While it may be possible to define some aspects of a Right Not to Communicate in terms of biological capacities, to specify a positive Right to Communicate runs immediately into the cultural limitations of the specifier. Given the relationship between culture and communication, the task of formulating a set of guidelines or principles on the Right to Communication, if it is possible at all, can most likely be accomplished by a multicultural group (Harms, and Richstad, 1975). In this context, the PUGWASH movement provides an example.

As you may know, the PUGWASH conferences on Science and World Affairs began in the mid-fifties at a time when the horrors of nuclear war had become fully apparent. The PUGWASH movement was begun by a manifesto drafted by Bertrand Russell and signed by Albert Einstein and a number of Nobel Prize winners from around the world. The first conference was held in Pugwash, Nova Scotia in 1957. Invitations were issued to participants in their "private capacities" and financing of the conferences was made possible by private philanthropic sources. To an

unusual degree, the PUGWASH Conferences were and have remained independent. About one such conference has been held per year. While it is difficult to assess adequately such a venture, it seems clear that the recent disarmament talks were made possible, in a significant part, by the work of PUGWASH (Rotblat, 1968).

In an attempt to determine the communication needs and requirements, in a word the Rights, of the individual human, of any community and the world, a multicultural group operating in a PUGWASH pattern seems useful. Such a Right to Communicate group would attempt to conceptualize the domain to be covered. Or, most probably, it would invent out of multicultural discussion a pattern not yet available to a person from any particular cultural group.

Quite possibly, in addition to an annual world conference attended by a few dozen or a few hundred conferees, regional Communication Rights sub-groups would emerge that would undertake specific research assignments. The range of questions is very large; those questions clearly require extraordinary research.

If the city is accurately described today as a communication center, then, many of the statements to be formulated in the future about the Communication Rights of Humankind also become instructions for the organization and management of urban areas. Such statements may take the form of articles, long-range goals, criteria for criticism, theoretic axioms, etc. Both form and content remain to be determined.

3.0 Summary

This paper begins with a broad look at the telecommunication/transportation relationships, then proposes an area of study called comparative communication systems, and concludes with the description of a mechanism which may at some future time lead to a deeper understanding of the relationships between human communcation and the humanness of being.

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INTER-COM '76 POSITION PAPER

MULTI-CULTURAL COMMUNICATION AND MENTAL HEALTH

by

Elizabeth N. Kunimoto

When I was in Geneva last spring, I spent about a week at the World Health Organization, interviewing people who were instrumental in utilizing competence in multi-cultural communication to attain goals in birth control, nutrition , medicine, and health in developing countries. A most stimulating interview was with a cross-cultural psychiatrist[1] who was concerned about the rising incidents of mental illness among members of these countries who were making the transition from rural community to an urban community, and from a predictable post-figurative culture[2] to a changeable pre-figurative culture. At that time we concurred that there was a need for conducting a study on the relationship between the training of multi-cultural communication skills and the enhancement of mental health.

Even in countries where technology is developed, information overload and numerous alternatives that make future choices uncertain comprise an environment condusive to breakdown in mental health. What seems to be needed is a way to learn how to learn in an uncertain milieu. Developing multi-cultural competencies of communication seemed to me a way to handle oneself in an unpredictable environment.

This was confirmed for me when I returned to the University of Hawaii in June to teach a course in intercultural communication. During a videotaped exercise on culture building, I observed my students as they became familiar with the rules of their new culture, then went on to interact with members of a "foreign" culture. I observed that the few who thrived in a new milieu and welcomed the strange and unfamiliar were those who expressed a willingness to tolerate ambiguity and stress and those who demonstrated creative behavior.

I decided to run a study during the academic year of 1975-1976 testing the following hypotheses:

(1) Some key elements of mental health--creative behavior and the ability to handle ambiguity and stress, and a strong self-concept--are positively correlated with competence in multi-cultural communication.

(2) Experiental learning systems reinforcing these elements are more effective in developing competence in multi-cultural communication than the cognitive method.

(3) Learning systems used in communication classes could be effectively adapted for use in counseling clients in mental health clinics.

Operational Definitions: Multi-cultural competence was defined as the ease of interaction among participants from diverse backgrounds in small and large groups, as measured by levels of achievement of objectives such as information gain, attitude change, and skill acquisition.

Menninger once defined mental health as the ability to give away money. In this study I defined mental health as not merely the absence of mental illness or neuroses but rather as a set of behaviors and attitudes that are self-actualizing.[3]

Selection of subjects: Subjects included two major groups of students: (1) students enrolled in University of Hawaii's intercultural communication course, and (2) adolescents referred to the psychiatric ward of Tripler Army Medical Center. The 70 university students were enrolled in two sections of a course in intercultural communication at the University of Hawaii and included majors from the College of Business Administration, School of Nursing, Departments of Sociology and Anthropology, Political Science, Human Development, as well as Communication. The 15 adolescents at Tripler Army Medical Center were dependents referred by their schools and families for counseling in the Child Guidance Clinic of the psychiatric ward.

Methodology: Instruments used to measure multi-cultural communication skills and mental health variables among the university group included attitude scales, creative performance tests, evaluations of videotaped performances, and written and oral tests. Instruments for the adolescents were modified so that they were less detailed and utilized more oral instruction than written instruction. (Several of the adolescents had

difficulty in reading).

A quasi-experimental design was used for both groups, with the experimental and control groups getting exposure to both types of learning systems after contrasting measures were completed. This merely meant that I did not use random selection of Ss, so dear to the hearts of experimentors, but I took all the Ss that I could get.

Learning systems tested out on the university group included cross-cultural simulations such as BaFa BaFa,[4] the Critical Incidents Approach,[5] the use of exercises in empathy building, paralanguage, body language, and the development of an intercultural interchange.[6]

The learning systems used among the adolescent Ss consisted mainly of nonverbal activities such as paralanguage, body language, and some proxemic exercises such as trust fall.

Conclusions: The Pearson correlation coefficient, the point-biserial correlation coefficient were used to establish relationships between mental health variables and multi-cultural communication skills. The F-test, the t-test and chi-square were used to test differences among the learning systems.

The experimental hypotheses were confirmed:

(1) Some key elements of mental health are positively correlated with competence in multi-cultural communication.

(2) Experiental learning systems reinforcing these elements are more effective in developing skills in multi-cultural communication than cognitive material.

(3) Learning systems used in communication classes could be used and effectively adapted for counseling clients in mental health clinics. (The co-therapist, who had worked with numerous teen-age groups indicated that although this was one of the most difficult groups to work with in terms of lack of openness, trust, and spontaneity, the communication activities appeared to be the turning point of counseling).

A pre-test, post-test design utilizing a t-test for correlated means measuring trust and interactional distance indicated that significant gains were made after the activities.

This summer in working with 75 culturally disadvantged students in the College Opportunities Program, I had a chance to observe six student

instructors in action. Three were alumni of the program and ethnically and culturally similar to the students they are working with--students of Hawaiian, Samoan, and Filipino backgrounds from the Waianae-Nanakuli and Kalihi-Palama areas as well as the other islands. The other three instructors were ethnically and culturally different and included those of Korean, Japanese and Caucasian background. Although initially there appeared to be a greater rapport between the alumni group and the students, after the first week of instruction there was no significant difference between the two groups of instructors in terms of relationships with their students or achievement of objectives.

Instructors who are culturally and ethnically different from their students can build positive relationships and achieve learning objectives by means of multi-cultural communication skills.

Last spring I visited colleges across the mainland United States, including Stanford, UCLA Berkeley, Michigan, Michigan State, New York University, Columbia University, Harvard and MIT, as well as colleges in Western Europe, the Caribbean, and Mexico. I was particularly interested in seeing how Colleges of Education were revitalizing their curriculum. Most of these colleges were building programs in multi-cultural education, cultural pluralism, and bi-lingual, bi-cultural education. Because of current public interest in such programs, the colleges of education were not only very much alive but becoming more involved in the community than ever before. If colleges of education can think beyond the granting of teaching degrees, they can work with teams of doctors, lawyers, engineers, psychologists, social workers, counselors, and social scientists, in the re-parenting or re-training of welfare recipients, drug addicts, parolees and convicts, through the use of multi-cultural communication and innovative learning systems such as the counseling triad. Departments of speech and communication can offer programs in which their majors can become involved in the designing of training programs, their implementation and their evaluation. Speech and communication departments can also offer support services in a manner similiar to the agency in the World Health Organization. Such services may be linked with the state-wide programs such as the Community Education Association programs.

The mental health of the citizens of our planet will continue to be a major concern and Inter-Com '76 provides a synergistic mileau in which

this concern can be translated into action.

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3. This concept of self-actualization is taken from Maslow's Hierarchy of Needs.

4. BaFa BaFa, a cross-cultural simulation, was created by Brent Folsom and is available from Simile II, 1150 Silverado, P.O. Box 1023, La Jolla, California 92037.

5. The Critical Incidents Approach was designed by Paul Pederson, Ph.D., of the East-West Center Learning Institute.

6. This process was described by L.S. Harms Ph.D. , author of Intercultural Communication.

7. Slack, Charles W. and Eileen Slack, "It takes Three to Break a Habit" Psychology Today, February, 1976.

POSITION PAPER

INTER-COM '76

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Ten years ago this month I was standing in a classroom in the northernmost portion of Appalachia surrounded by twenty-four 3½-5½ year old children. I was the project director for a research and training grant designed to improve the oral communication skills of economically impoverished children. We had just had a deeply moving experience. One of the children, a 4½ year old boy, had spoken his first words in two years. Charlie had stopped talking several years earlier when his father and his dog had died on the same day. On this particular day in April when we were in a group saying good-bye to each other, Charlie turned to his teacher and broke his two years of silence by saying "wuv you."

In 1968 I was in an encounter group in California. I had sat through eight weeks of the group (my first) without uttering a word. During the eighth week of the group I experienced a profound emotional release and discovered words and feelings within myself that I did not know existed.

Today I am directing a continuing education program for adults specifically in the areas of the communication arts and sciences. Throughout my professional career I have had the opportunity of working with persons 3½-92 in various aspects of oral communication. I have also been greatly interested in my own development. I am alternately terrified and fascinated by my compelling desire to increase my awareness and skill in intra-personal and inter-personal communication. Judging from the number of people in courses and workshops dealing with communication in one aspect or another, I am far from alone.

Because of my own personal development as well as my professional work with persons in various stages of life, I am increasingly convinced of the importance of the following in order to insure that the young will acquire the communication competencies needed to function in a rapidly changing world:

1. Learning must be viewed as a lifelong process - particularly as it regards human communication.

2. Communication research and training must be more attentive to developmental phases in a person's life before birth to after death.

Lifelong Learning

> "The changing nature of our society requires virtually all citizens to gain new skills and intellectual orientations throughout their lives. Formal education of youth and young adults, once thought of as a vaccine that would prevent ignorance later in life, is now recognized as inadequate by itself to give people all the educational guidance they will need to last a lifetime. The obsolescence of knowledge, the rapid growth of new knowledge, the shifts in national priorities, the multiplication and complexity of societal problems, and the close relationship between the application of knowledge and social progress - all lead to the conclusion that lifelong learning is not only desirable but necessary." (1)

In the last decade adults have been able to re-enter formal education and feel as if they are a legitimate constituency. This has not always been the case. Even today it is often a difficult and traumatic experience for adults to return to school. Our society is just beginning to think in terms of formal and informal education spanning the years. Numbers are in the favor of the adult student. The only real enrollment increases higher education has seen in the last few years have been in the areas of continuing education. Stanley Moses of the Syracuse Educational Policy Research Center prepared statistics on adult education participation, 1960-1975. His survey indicates a dramatic increase of 290% in adult education participation in those fifteen years.

In a 1972 national survey done by the Educational Testing Service, it was reported that the actual number of adult learners was 32,000,000. The number of "would-be" learners - those persons who expressed an interest in furthering their education if possible - was set at 80,000,000. When the actual learners were surveyed as to their reasons for continuing their education, 69.1% indicated information and intellectual development; 47.6% said that it was for job and education development. This indicates a vast number of people feeling their own personal need to better understand and enrich their lives apart from just economic and career pressures. At this point the majority of the adult education market is involved in non-credit courses and workshops.

A study completed by Joseph E. Champagne for the Center for Human Resources, University of Houston, entitled "Higher Education, Lifelong Learning and Community Service: A Profile of Action and Responsibility" includes representative course offerings from urban universities across the nation. (2) I was interested to note the number and variety of course offerings dealing in one aspect or another of human communication. Dr. Champagne separated the courses into various categories: #1 - Problems and Issues in Society; #2 - Personal Interest; #3 - Skills and/or Knowledge for Occupational Improvement; #4 - Intellectual Skills Development; #5 - Personal Life Problems and Demands. In category #2 there were listed a series of courses dealing with communication skills: voice and diction, effective speaking and leadership, creative writing, fiction writing, effective listening, non-verbal communication, reading, improving your image for personal and career advancement. There were also listed courses for personal enrichment which included: helping people in a crisis, coping with success in the adult years, taking leave of broken relationships, and the dynamics of helping relationships. In categories 3, 4, and 5, courses focusing on communication skills were in ample supply and included: developing questioning skills, a model for solving problems, intellectual and language development in the

in the small child, developmental reading, communications training for couples, leadership training, analysis of interpersonal behavior, encounter techniques and workshops, sensory awareness lab, transactional analysis in pairing, and parent effectiveness training.

From my knowledge of the field of continuing education, I would conclude that more adults are taking part in courses having to do with communication skill development and awareness than are taking courses in any other single category. The conclusions I am drawing for our work are:

1. The adult interest in communication exists. This can be utilized since the adults who have gained greater communication proficiency and awareness will be much better able to influence their children and in turn help them develop greater communication awarenesses and skills.

2. We need to continue to offer communication courses and workshops to persons of all ages and to be attentive to ways in which readiness levels and needs change throughout the life span.

3. Through precept and modeling children should be inculcated with the idea that improving their inter- and intra-personal skills is indeed a lifelong process. By the time they are adults and feel the need for additional formal training they will be less likely to feel awkward or retarded in their needs. They will also be likely to be more open about the learnings available to them in different stages of life.

The Developmental Approach

A child's comprehension of language precedes his use of that language. When a child begins to speak, his ability to use syntax precedes his ability to articulate the way in which syntactical structure operates. From many studies including, most notably, Piaget, we know that there are developmental sequences in the comprehension and use of language and the development of thought. In the past ten to twenty years the field of psychology has begun to take a developmental approach to the study of human behavior as it relates to the entire life cycle. Erik

H. Erikson specifies three psychological "crises" in the life of each adult: identity, generativity, and integrity. It is his feeling that they occur in youth, middle age, and old age respectively but usually overlap and vary in intensity and duration from person to person. Dr. George Vaillant of Harvard, Dr. Daniel Levinson of Yale, and Dr. Roger Gould of UCLA have also contributed to a greater understanding, if not debate, concerning adult life cycles.

In an article in Psychology Today by Dr. Gould entitled "Adult Life Stages: Growth Toward Self-Tolerance," the by-line reads:

> "Adults are fully forged by adolescence. Growth continues, from the confidence and optimism of the twenties through the doubts of the early thirties, the urgencies of the early forties, and the mellowing and self-acceptance of the fifties..." (3)

The field of speech-communication has a tremendous opportunity in research and in teaching to study interpersonal and intra-personal communication skills and awarenesses over the life span and to coordinate our research with that of other disciplines. We know something about the oral and written language development of the child. Are there similar developmental patterns for interpersonal skills and awarenesses? Are there particular times in each of our lives when we are more open to certain learnings about our interpersonal and intrapersonal processes than at other times? Are some awarenesses best learned after an adult has had certain life experiences? What are these? I think that taking such a developmental approach would help us answer questions about competencies which youth can rightfully be expected to learn and those competencies which are better learned later in life. I am of the opinion that the knowledge concerning what needs to be learned when and how can best be gathered when approached developmentally over the life span. (I like the idea of defining the life span as occurring before birth and after death.)

I am reminded of a personal experience about eight years ago. I was directing a creative music-play which I had written for children ages 4-17. These music-plays were written in such a way as to involve the children in decision-making as it regarded what characters they wanted to play and what they wanted their characters to say. I had provided the structure, however, and the characters had to fit within the proscribed structure so that the play could have coherence.

One day we were rehearsing the stuffed animal scene. I had provided the structure of the stuffed animal scene by saying that all characters had to be stuffed animals. I had also provided suggested animals and suggested dialogue for those children who didn't want to design their own. We were in the process of rehearsing and each child was presenting his character and trying out dialogue. One child's animal just didn't quite fit in with the rest and the dialogue was a bit out of character with the scene as I had envisioned it. I told the child this and made suggestions as to how we might solve the problem. Andy, a very bright and precocious six-year old who, at various times, had been the bane and joy of my existence, stepped to the front of the stage and in a most indignant, loud voice said, "Now, Mary-Linda, did you mean that in fact we were to make our own decisions about our animals OR did you mean that we were to think of the ideas BUT YOU would make the decision?" I was dumb-founded. Of course he was right. I had implied that the children had absolute decision-making power within the title "stuffed animals" but, in fact, I had the final word and I wasn't willingly relinquishing it. I had hoped no one would notice the distinction (the hope, I am sure, of many an administrator)!

I draw a parallel between this instance and the knowledge we have of language development. For instance, Andy comprehended the subtleties involved in separating fact from inference. He could question me on the difference between what my words said and what my actions indicated. He could not have articulated the principle involved. Children use interpersonal skills in a most sophisticated manner. When are the

principles which are used intuitively best brought under conscious control?

In summary, much of what we can learn about children's use of interpersonal communication skills and awarenesses can be most helpful in the training of adults since we seem to regress rather than progress in our abilities to be in touch with our feelings, to acknowledge the subtleties of the spoken communication, and to confront forthrightly a more complete understanding of any given bit of communication. On the other hand, our learnings in adulthood can bring under our conscious control those principles so beautifully used in childhood and can help us in the training of children. I advocate this extended life cycle approach as befitting our conference's stated purpose.

FOOTNOTES

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OVERLOAD: THE RECEIVER'S CONDITION

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OVERLOAD: THE RECEIVER'S CONDITION

In the midst of preparing this paper, an attempt to "set forth an idea, principle or practice etc., that will shed light on the Calgary deliberations," I find myself overcome by what I have not thought much about until now--the future and all its possibilities. Titles such as Learning for Tomorrow, Tomorrow's Child, Futurism in Education, Profiles of the Future, and even The Future of the Future flood my mind. I am, at present, a victim of the Conference before it has begun; I am overwhelmed with information about tomorrow and the time beyond. All of a sudden, the future seems very far away. I think to myself, "I don't want to think about the future. I don't want to talk about the future. I don't care about the future. The future is very unreal--I can't remember it."

This kind of response is symptomatic of a condition described as information overload, "one of the most pervasive and novel characteristics of life in technologically advanced societies" (Lipowski, 1975, p. 199). This condition of overload or overstimulation can be described as the "condition caused by an excessive number of often conflicting stimuli, which ceaselessly bombard an individual" (Bellak, 1975, p. 6). For example, what do we believe about the future? Is the world consuming and polluting itself to an imminent end? Will the future be one of radiation disasters, ozone destruction, famine, and war? Or, does the future promise the elimination of hunger, expanded leisure, increased longevity, etc.--a better life for the world's population? No one knows the answers for sure. Consideration of the future, however, is one more aspect of life with which we must contend so that we may as Bucken (1974) recommends, jump ahead not to escape to fantasy but to "lure that future into the present and negotiate with it while the options are to be chosen rather than imposed" (p. 143). The future screams for our attention along with all the other messages we daily endeavor to assimilate.

Never before in history have humans been expected to process so much information so rapidly, to adapt so quickly to a constant flow of perpetually changing stimuli. As a result the receivers cannot process the quantity of input (i.e. intensity, duration, and rate of change of the input) nor assess the quality dimensions of the input (i.e. sensory modality, novelty, complexity, incongruency, attractiveness, and subjective meaning of the input) (Lipowski, 1975, p. 217). Hence, we find ourselves in a constant state of information overload.

Information about the political campaign of 1976 is another example of this state of overload. We have been inundated by messages via newspapers, periodicals, radio, and television concerning the candidates' hair color, food preferences, campaign techniques, responses to questions, state of health, ability to smile and sometimes their stands on the issues. While some of this is important information, we find ourselves unable to process the sheer quantity of the numbers of messages or to analyze the significance and ramifications of the messages. "The majority of the population. . .no longer are capable of checking what is true and what is not" (Ruesch, 1973, p. 18). Saying "What's the use?" or "They're all a bunch of crooks, anyway," we abandon our efforts.

Not all of the input that assails us consists of symbolic stimuli such as words, gestures, etc., which are particular messages consisting of meaningful communication. Additional input consists of physical stimuli such as noise, crowding, etc., which, while they impinge upon the human processing system and in that way carry messages, are really lacking in informational content. The symbolic stimuli are called information input; the physical stimuli are called sensory input. Although the concepts of sensory and information overload do overlap, the concept of information overload is more pertinent to communication inquiry and is the focus of this paper.

Our state of constant information overload, a problem of the present, will only intensify in the future, and the young will be expected to survive complex communication messages bombarding them from all directions, competing incessantly for their attention. What can we do then, as educators, to provide for the communication competencies needed by the young to live comfortably in a future that has the potential of constantly overwhelming them with information? The purpose of this paper is to explore the concept of information overload and to examine the implications of the problem for speech communication education.

Effects of Information Overload

In the lead article of Comprehensive Psychiatry, June 1975, Lipowski calls for interdisciplinary research on sensory and information overload and asserts that overload is a "social and public health problem no less grave than overpopulation, pollution, and the growing scarcity of natural resources" (p. 219). Other researchers agree with Lipowski, and a distillation of the available research that has been conducted in the area of information overload reveals a potentially devestating impact on the human organism:

1. The human organism has an information processing capacity which is limited and when that capacity is exceeded, overload occurs (Miller, 1956, p. 8; Broadbent, 1971, p. 9; Ludwig, 1972, p. 1297; Lipowski, 1975, p. 200) resulting in maladaptive behaviors such as omission of information, error or incorrect processing of information, queuing or delaying of response, filtering, approximation, use of multiple channels, decentralization, and escape (Miller, 1956, p. 209).
2. "Overload subjects show increased heart rate and serum cholesterol levels: they smoke more and have more job dissatisfaction and tension as well as lower self-esteem" (Lipowski, 1975, p. 207). Lipowski (1975) reports that according to a national survey, 44 per cent of male white-collar employees describe themselves as sustaining some degree of over-

load (p. 206); the problem is widespread.

3. Attractive-information overload is likely to result in "neurotogenic intrapsychic conflicts among incompatible approach tendencies and lead to maladaptive coping strategies that may take the form of behaviors inimical to health, psychological well being, and social order" (Lipowski, 1975), p. 213). Such coping strategies include: selective unresponsivity, avoidance or the intake of chemical agents, repeated approach and attempts at consummation, and passive surrender.
4. The effect of information overload is idiosyncratic. Since there are individual differences in tolerance levels of information input, people will vary in their response to given stimuli, but all people will eventually hit a critical peak which results in negative responses (Zuckerman, 1969, p. 410; Korner, 1971, p. 608; Lipowski, 1975, p. 216).

These studies involve only relatively brief exposure to overload and produce limited information on the results of sustained exposure to overstimulation. Our own personal experiences may be more meaningful in terms of long range effects. Many of us complain frequently of "information overload." Lipowski (1975) points out that the academic community, in a scramble to keep on top of things, is indeed a group highly afflicted with the condition of overload and thus highly susceptible to its affects (p. 209). Schramm (1975) maintains that in order to keep up with his field he must read 42 learned journals regularly and that in some academic disciplines, graduate students must read five to six hundred articles in preparation for designing a dissertation (p. 4). This kind of overload increases the risk of developing coronary heart disease (French & Caplan, 1970, p. 383), and as we have all experienced, it can result in "cognitive disorganization, impaired task performance, negative affective tone, irritability, and somatic symptoms" (Lipowski, 1975, p. 217).

Overload is, however, far from limited to the academic community. Other members of the society are also dispairing over their inability to withstand the flooding of stimuli. The O'Neil and O'Neil (1974) concept of the "option glut" (p. 20), i.e., too many choices resulting from rapid change and overstimulation, speaks to the problem in our popular literature. They state:

> The world in which we now live is a veritable kaleidoscope of options, swirling past us like a speeded up film. New life styles, new products, new relationships and new problems proliferate daily. . . .The effect is as likely to be as disorienting and unsettling as it may be exciting (p. 20).

The success of their book, Shifting Gears (1974), is evidence that the general populace is uncomfortable with their ability to handle increasing options and accelerating change and are seeking help on managing overload.

Although the research on the effects of information overload has been too limited for the derivation of solid conclusions, there is evidence from selected studies and from our own personal experience to indicate that as Lipowski (1975) states "information-input overload has potentially deleterious consequences for job performance, for subjective sense of well-being, and for health" (p. 208). Since overload occurs within all levels of communication from intrapersonal through international, it is imperative that we find a way of educating the young for judicious coping with an overabundance of stimuli (Lipowski, 1975, p. 214).

Causes of Information Overload

The primary cause of information overload has been our success in discovering and disseminating information. The "Age of Information," though long predicted, has surpassed all expectations. Growing by geometric proportions, the amount of

information available as a result of scientific investigation and "global village" input eclipses our ability to process it. We are under a daily barrage of complex and conflicting signals vying for our attention, pleading with us to buy objects, give to organizations, believe in causes, trust individuals, vote for particular legislation, assimilate new information and new ways of thinking about old ideas.

Ideas about nutritionally balanced, healthy diets, for example are now under seige as research on cholesterol, pesticides, mercury content, etc. begin to impinge on previous, generally held attitudes. Bellak (1975) captures an example of the confusion that results from an overload of conflicting information in the following conversation:

> "Better not [eat] beef, it's high in cholesterol," says one to the other. "Why not have the fish?"
>
> "But the fish is probably full of mercury."
>
> "And the crabs are high in cholesterol, pollution and mercury."
>
> "Well, the vegetables will save us."
>
> "You mean with their high concentration of pesticides?"
>
> * * *
>
> "Who cares about cholesterol? Either you are going to get a coronary or you're not; it all depends on your personality."
>
> "As a matter of fact," someone at a neighboring table chimes in, "if you have a family history, you're in for it."
>
> "Not so, if you avoid too much cholesterol from the start, it really makes a difference. But once you're 35, the cholesterol's already there, and it's too late for a change in diet to do any good." (p. 11, 12).

He goes on to say,

> The rapid changes of our society makes it almost as difficult to perceive reality as it is to view the real world from a rapidly spinning merry-go-round. . . .

> How can the average person really understand, and quickly, the problems of pollution, the devaluation of the dollar, the prime interest rate, the role of cyclamates in soft drinks, complex problems of Congressional ethics, Watergate, and U.S. economic policy, not to mention the economics of Russia and China? . . . The attention span of many people is overburdened by all the facts of modern life (Bellak, 1973, pp. 59, 169).

Contributing to this is a

> Predilection for collecting information on everything we can get our hands on [which] has circumvented the law of natural selection through which great ideas and developments survived on the strength of their continuing appeal, while lesser efforts were forgotten (Eurich, 1975, p. 145).

The great ideas are buried. In the first place, there is too much information to absorb to find the ideas which are worth retaining. And, secondly, the information is so complex that we have difficulty evaluating it.

Not only has the "Age of Information" deluged us with messages, but communication technology has allowed us to store and send this information to more people in all parts of the world in less time than ever imagined. Film, telegraph, radio, television, cable television, communication satellites, and various other communication tools have all enhanced our ability to create a surfeit of messages. The immediate future promises a still greater load of information carried by newer and faster conveyance systems. Even now, we have under production picturephones which may alter, or at least in some way, affect our concept of communicating person-to-person; two way cable television with multi-channel potential of hundreds, some say thousands, of channels which will provide instant feedback capability for the viewer thousands of miles from the source of the communication; variable speech control

units which will compress speech and make it possible to listen at speeds up to five, six or ten times that of normal speech; and videodisc playback systems which will enable the user to play video records. Only economic considerations keep them off the store shelves at present; cheaper means of production will soon make them accessible to every one.

Past tomorrow, predictions are less dependable, but the potential is unlimited. Schramm, in 1975, asserted:

> Wave guides of various kinds could multiply existing channel capacities by hundreds, and optical fibres, the newest thing, could multiply them by thousands or tens of thousands. Holography is being worked on in the laboratories. When you see that technique demonstrated, you begin to imagine what television might look like in the year 2000, for it seems to be possible, by means of intersecting laser beams, to produce three-dimensional color pictures, out in the open, in the middle of a room, without screen or tube. And still farther into the future, perhaps 50 years, is the very real possibility that every individual on earth can have an individual radio channel for his own communication. (p. 4)

It is difficult to envision what may happen except to realize that the media of the future will differ from today's as much or most likely more than today's differs from the nineteenth century. Futurists tell us that the information explosion and the growth of information transmission systems will continue

unabated. Many of today's young people, as grandparents, will look back on our present so-called sophisticated communication technology as interesting, quaint customs of the time. One unalterable result of the development of all this communication technology is to increase the power of the sender to deliver more and more information farther and faster in tidal wave proportions.

By comparison, the receiver is relatively unarmed for the onslaught. As Schramm (1975) points out,

> Technology on the receiver's side, with one exception, has been less dramatic than on the side of the sender. To help us sort out the flood tide of information from the sender's media, we have had to depend on devices as tame as libraries, catalogs, bibliographies, abstracts, and summaries. Recording machines and photocopying devices have made a difference. . . . But the most significant development on the side of the overloaded receiver has been the computer. Here for the first time we have a machine able to handle enormous amounts of information, sort it out for us, store it, retrieve it, help us find what we need. The computer will probably turn out to be the great communicating machine of the last quarter of this century. And chiefly because it is the best tool in sight that enables us to take charge of information, rather than information take charge of us. (p. 4, 5)

In the future, even more so than now, receivers will find themselves trying to respond to the overload of complex information, delivered by both people and amazing machines, and falling farther and farther behind.

And So?

What can we do? If we were technologists, perhaps we could invent a new piece of technology, like the computer, which would greatly assist the receiver. Or if we were chemists or neurophysiologists, perhaps we could enlarge the information processing capacity of individuals so that they might effectively process greater loads of information input. (Perhaps these long range possibilities will reduce the problem.) But we are communication educators who must provide short range possibilities for dealing with information overload. We must identify those communication competencies which are most promising for effective management of the condition of information overload--particularly in communication situations--and then provide a means of teaching the young adaptive coping behaviors.

While the task is overwhelming, I would like to suggest some possible preliminary directions for our thinking which might prove fruitful for identifying such adaptive coping behaviors.

1. How do we make students aware of the problem of information overload and minimize the impact it has on their lives?
2. What can we teach about organizing information from a <u>receiver's point of view</u>? Of what relevance to the receiver are the concepts of inferences, filtering, gatekeeping, and chunking?
3. Can we develop a greater tolerance for ambiguity and hold several points of view in suspended judgment?

These suggestions are only a beginning point for our deliberations. While much about the future is still unknown, information overload is an unquestionable given. Teaching the young to deal with it in constructive, meaningful ways is to provide them with a survival strategy in a rapidly changing world. It is a communication competency which I hope we can assist them in acquiring.

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Intercom Position Paper

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Margaret Mead in Culture and Commitment describes three kinds of culture. In a postfigurative culture children learn from adults. In such a culture Mead writes ". . . change is so slow and imperceptible that grandparents, holding newborn grandchildren in their arms, cannot conceive of any other future for the children than their own past lives." In a cofigurative culture both children and adults learn from their peers. This pattern has been most common when people moved into new cultural situations. Pioneers in the American west, for example, had little use for the tools of a European or New England culture that had been passed to them by their forbears. The skills required for survival were developed and shared among peers. Similarly, second generation youth in any culture are unable to relate to the language, customs and memories of their parents and often learn from their peers those aspects of culture that might have been transmitted postfiguratively. Finally, there is a prefigurative culture in which adults learn from their children. While there have often been aspects of culture transmitted postfiguratively (fad, fashions, specific innovations), never has a prior civilization faced a world like ours. Mead writes, "In the past there were always some elders who knew more than any children in terms of their experience of having grown up within a cultural system. Today there are none. It is not only that parents are no longer guides, but that there are no guides, whether one seeks them in one's own country or abroad. There are no elders who know what those who have been reared within the last twenty years know about the world into which they were born."

How arrogant educators have always been, prescribing curricula based on projections from their obsolete experience. I reread the Saber Tooth Curriculum every year or so. My laughter becomes a little more hollow each time. Tiger scaring and horse clubbing and fish grabbing, indeed! And never wear white shoes after August first, the motion to rescind must be made by someone who voted on the prevailing side, the first affirmative speaker must prove an inherent need for change and McCroskey's dimensions of source credibility parallel Aristotle's components of ethos, true or false? If always there has been a need for a sense of humor when telling someone younger what he or she will need to know later, how much greater is that need in the world's first prefigurative culture? (A fortiori, I note as I write that sentence--a bit of knowledge I was taught but do not teach.)

In a sense the whole theme of our conference is absurd. Instead of talking about competencies our students will need perhaps we need to discuss ways to restructure education so that children are the teachers. Many of my students are older than I am. Our department's request for a one year extension for a colleague who has reached mandatory retirement age was denied. The dean did not challenge the competence of the professor but talked of the need "to lower the average age of the faculty." What role is left for the elders of a prefigurative society? We no longer value them as teachers, but as college enrollments decline (youth reject the knowledge and skills designated as important by middle-aged professors) we suddenly seize upon them as potential learners. The same administration that wants to lower average faculty age designs a "tuition free--don't worry about prerequisites" policy for all senior citizens. The aged were left to talk to themselves in the peer stratified cofigurative days. The move toward a prefigurative style puts the generations back in touch. Our elders are needed after all--to guarantee sufficient enrollment to justify the existence of those 25 to 35 year old faculty members.

Although I'm not even sure that schools will be needed in the future, or who should be teaching whom if schools do exist, I have trouble imagining a world without them. It may be absurd to try to predict competencies for the next generation but it seems irresponsible not to try. When I get too engrossed in futurist literature and thinking I get lost in the forecasting sport. I almost come to believe that there is a future already preordained and we social scientists and philosophers are involved in guessing what it will be like. I approach this paper and this conference asking not "what can we do to insure that students will have the communication competencies needed for the future that is most probably?" but "what communication competencies should students have to create the sort of future I believe is most desirable?" I'm not so naive a free willer as to presume that I can control the future, but I surely plan to try to influence it. I'm very interested to discover the limits of my power and I hope that in Calgary we'll have some discussions on what those limits are. From persons more knowledgeable than I, I want to hear which aspects of technology are truly irreversible. Must the rate of social change continue to accelerate? Can a healthy ecosystem still be salvaged? Will there always be an energy crisis? a population crisis? A clearer understanding of what can be will help me draw conclusions about what ought to be.

The most obviously important communication competencies required for the future are those which will insure human survival. Gary Cronkhite in Communication and Awareness claims that our survival as a species is dependent upon an ideological evolution which follows the biological rules of variety, selection and retention. A changing world requires that we generate many creative social blueprints, that we select among them critically and that we are able to implement them. All of these steps require communication expertise. The effective communicator of the future will be able to use communications from others as sensory extenders, to learn things she or he cannot experience first hand and to sift that data critically to obtain the most reliable information possible.

A second category of communication skills that will be indispensible in our changing world is relational communication. Toffler and others have discussed the breakdown of the extended family; the changing patterns of courtship, marriage, and divorce; the mobile and transitory nature of occupations and residences. Intimacy needs that were once filled somewhat automatically by family and community connections are not provided for in the emerging social structure. Superficial substitutes that promise instant intimacy only testify to the fact that there are many, many lonely people. Connectedness is no longer a given. The individual may choose the number and kinds of connections he or she prefers. But the individual must have the communication skills to forge and sustain those connections. The beauty of this development is the great flexibility it allows. The person who chooses not to marry, or to marry but not have children, or to have children but not marry, the person who opts for communal living, the homosexual, the bisexual--these persons may choose lifestyles that are fulfilling to them without being labelled as deviant. In this very flexibility lies the danger of the interpersonal new world--for while all kinds of relationships are possible, none are automatic. A person must take an active rather than a passive stance toward relating. One must ask do I want romantic love in my life right now? How many intimate friends do I want? How wide a circle of acquaintances do I want? Do I want to be connected with children? With old people? When these questions are answered one must actively

undertake to create the relational world he or she envisions. Our Greatgrandparents' world practically required early marriage and geographical isolation may have limited to only a handful their potential partners. In socially casual sprawling suburbia our freedom, and thus our responsibility, is vast. If there is a type of person I'd like to meet, a type of lifestyle I'd like to explore, there are opportunities close at hand. I have friends who live communally. I have friends who have committted themselves to an extended family comprised of seven nuclear families who share important occasions together and bear an aunt/uncle relationship to one another's children. The possibilities are infinite. More and more of my acquaintances are beginning to actively design lifestyles that fill interpersonal needs at different points in their life cycles. As researchers we need to look at those experiments that trace the communication imperatives that differentiate success from failure. As teachers we need to teach our students to understand their own changing needs and to learn how to meet people, initiate relationships, make commitments, negotiate differences and terminate or de-escalate relationships. A person should not feel guilty if needs for privacy, intimacy, challenge, security change over time. Rather we should view changes in lifestyle as appropriate responses to personal development. The person who divorces need not justify his or her decision by rejecting marriage. The person who finds an active career in mid-life need not view years as a homemaker and child rearer as wasted. Young people should develop the communication skills to live alone and together, to function in periods of great stimulation and of contemplation. They must master the skills of commitment to the relational choices they make and the very difficult skills of transition as relational changes are made.

Finally, youth of the future need to be able to use communication for spiritual fulfillment. This is a curious word choice for one who is neither traditionally religious nor a serious believer in parapsychology or the occult. Yet spiritual rather than intrapersonal best describes the sort of communication I refer to. Many current movements and social phenomena suggest the emergence of a new spirituality. I detest most of its trappings, but it is with great relief that I succumb to the underlying message. My adolescent anger at religious hypocrisy has burned out enough that I remember what I've always known: there is a basic human need to try to understand the forces beyond daily experience, there is a sense of reverence toward nature, toward humanity and toward the interconnectedness of our universe that we need to symbolize and celebrate. The expression of this spirituality happens very privately in moments of being "tuned in to oneself" and also publicly in the unembarrassed sharing of feelings more primitive than what we usually call feelings. I know little of the communication competencies that help us to actualize our spirituality in personally meaningful ways. Yet I know that researchers and teachers must ensure that students in the future have competencies to fill spiritual needs as well as relational and survival needs. In order to survive we must know how but we must also know why.

Communication Education for Yesterday, Today, and Tomorrow - First Things First

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At the 1970 World Conference on Education in Asilomar, California, Senteza Kajubi emphasized that schools cannot respond to the challenge of children who demand more and better education today, merely by doing well or better what was done in the past.[1] Broadened, this exhortation to educators from throughout the world applies also to our theme and to our field in particular. Communication education will not be adequate or appropriate if what is today is merely extended in part or in toto. Instead of extension of what we have, the approach should be total re-thinking of what has been, what is, and what might be. This should be followed by continual monitoring and even further reconsideration.

What might be, seems likely to be greater than the sum of today plus the yesterdays. Even the nature of our future existence might be altered. To illustrate the possible extent of change, life, for example, could be unfolding within orbiting space colonies. Issac Asimov, summarizing Professor Gerard O'Neill's notion of orbiting space colonies which would become permanent parts of the earth-moon system, stated that O'Neill,

> . . . envisions long cylinders designed to hold human beings plus a complex life-support system, facilities for growing food, maintaining atmospheres, recycling wastes, and so on.[2]

With regard to implications of O'Neill's conception, Asimov believes that with the development of such space colonies, might come the salvation of humanity and its entry into a new and larger scene with changes overall as momentous as those following the discovery of fire.[3]

Whether or not such "radical" changes occur, it seems likely that things will be different. How different and in what ways different is not clear to us now. No matter what emerges, the alterations will affect the

lives of people. Changes also concern us as we consider what we can do to insure the young will acquire the communication competencies needed to function in a rapidly changing world. Obviously, the nature of the future affects the general nature of education for the future and, in particular, the nature of communication education for the future.

Thus, the central thrust of this paper is that, as we contemplate our proposals for the future: (1) We continually remind ourselves of the biases we start from. (2) We are wary of grand schemes and best laid plans that do not start from a strong theoretical base and thorough examination of the assumptions underlying these plans, and (3) Whatever we do we include provisions for continual reevaluation of our assumptions and our conclusions. We need to keep reminding ourselves that anything can happen and we and our students should be prepared for just that.

To start, our assumptions are often unconscious. We should concentrate on making unconscious biases conscious and on understanding the implications of our conscious and unconscious biases as they impinge upon our planning of communication curricula for the future.

If we start from unexamined, sometimes unconscious, assumptions such as communication education must take place in certain settings, must be facilitated by persons with certain credentials, must emphasize certain skills, and should be directed at certain persons for particular reasons, we risk unduly limiting the possibilities.

Unexamined assumptions undermine and restrict human endeavors in insidious ways. Edward De Bono in his many books and articles cautions against unexamined assumptions and habitual patterns of thought. The story of the merchant, the money-lender, and the proverbial beautiful daughter, illustrates how our traditional patterns of thought serve to

limit us:

Many years ago when a person who owed money could be thrown into jail, a merchant in London had the misfortune to owe a huge sum to a money-lender. The money-lender, who was old and ugly, fancied the merchant's beautiful teenage daughter. He proposed a bargain. He said he would cancel the merchant's debt if he could have the girl instead.

Both the merchant and his daughter were horrified at the proposal. So the cunning money-lender proposed that they let Providence decide the matter. He told them that he would put a black pebble and a white pebble into an empty money-bag and then the girl would have to pick out one of the pebbles. If she chose the black pebble she would become his wife and her father's debt would be cancelled. If she chose the white pebble she would stay with her father and the debt would still be cancelled. But if she refused to pick out a pebble, her father would be thrown into jail and she would starve.

Reluctantly the merchant agreed. They were standing on a pebble-strewn path in the merchant's garden as they talked and the money-lender stooped down to pick up the two pebbles. As he picked up the pebbles, the girl, sharp-eyed with fright, noticed that he picked up two black pebbles and put them into the money-bag. He then asked the girl to pick out the pebble that was to decide her fate and that of her father.

Imagine that you are standing on that path in the merchant's garden. What would you have done if you had been the unfortunate girl? If you had had to advise her what would you have advised her to do?

What type of thinking would you use to solve the problem? You may believe that careful, logical analysis must solve the problem if there is a solution. This type of thinking is straight-forward vertical thinking. The other type of thinking is lateral thinking.

Vertical thinkers are not usually of much help to a girl in this situation. They way they analyze it, there are three possibilities:

1. The girl should refuse to take a pebble.
2. The girl should show that there are two black pebbles in the bag and expose the money-lender as a cheat.
3. The girl should take a black pebble and sacrifice herself in order to save her father from prison.

None of these suggestions is very helpful, for if the girl does not take a pebble her father goes to prison, and if she does take a pebble, then she has to marry the money-

lender.

> The story shows the difference between vertical thinking and lateral thinking. Vertical thinkers are concerned with the fact that the girl has to take a pebble. Lateral thinkers become concerned with the pebble that is left behind. Vertical thinkers take the most reasonable view of a situation and then proceed logically and carefully to work it out. Lateral thinkers tend to explore all the different ways of looking at something, rather than accepting the most promising and proceeding from that.
>
> The girl in the pebble story put her hand into the money-bag and drew out a pebble. Without looking at it she fumbled and let it fall to the path where it was immediately lost among all the others.
>
> 'Oh, how clumsy of me,' she said, 'but never mind--if you look into the bag you will be able to tell which pebble I took by the color of the one that is left.'
>
> Since the remaining pebble is, of course, black, it must be assumed that she has taken the white pebble, since the money-lender dare not admit his dishonesty. In this way, by using lateral thinking, the girl changes what seems an impossible situation into an extremely advantageous one. The girl is actually better off than if the money-lender had been honest and had put one black and one white pebble into the bag, for then she would have had only an even chance of being saved. As it is, she is sure of remaining with her father and at the same time having his debt cancelled.[4]

Surely the point is well taken. We can so easily get inadvertantly trapped by thinking that seems logical and designed to lead to the appropriate course of action. However, when we pass over the obvious and rather than begin from beginning, begin from the middle with accepted and incompletely examined assumptions, we are limiting ourselves. And perhaps most sadly, we are even unconscious of what we are not considering.

Consider, for example, how our association between the field of speech communication and extracurricular activities such as debate and drama might still be affecting our development. Such assumptive association with the extracurricular, rather than with the integrally curricular, may inadvertently be affecting our development today.

Thus, the centrality of speech communication skills in the lives of all adults and all children may be being overlooked, to some extent, because speech communication skill development has historically in our cultures been assumed to be extracurricular.

Certainly there are a multitude of similar examples. If, however, we can constantly be alert to examination of all underlying assumptions and conscious of their implications and possible effects, we are less likely to find ourselves mired morasses from which we do not know how to escape, or, for that matter, know why we are there. Recent history of "educational innovation" in the United States provides a useful example of this. All kinds of things were overlaid on the U.S. classroom--programmed instruction, team teaching, modular scheduling, interdisciplinary studies, to name but a few. As Benjamin DeMott stressed, these attempts were essentially worthless because of an unexamined false assumption on which they were based. "But the root cause lies elsewhere, in a false assumption that changes in educational arrangements can profoundly alter the moral tone and quality of life, in obliviousness to the enemy within."[5]

I include this quotation because it simultaneously makes two points relevant to this conference. Unexamined assumptions have effects and simply tinkering with educational techniques will not significantly alter education.

Freire underscores the potential for this to happen. He insists that,

> . . . methodological failings can always be traced to ideological errors. Behind the practice of agricultural extension, he sees an (implicit) ideology of paternalism, social control, and nonreciprocity between experts and 'helpers.' If, on the other hand, one is to adopt a method which fosters dialogue and reciprocity, one must first be ideologically committed to equality to the abolition of privilege, and to non-elitist forms of leadership wherein special qualification may be exercised, but are not perpetuated.[6]

In intercultural speech communication education we have many unique opportunities on these scores. Since, essentially, we are defining a new field for our cultures, we should be relatively free of binding assumptions and, similarly, have not been plagued or blessed with a history of new and "revolutionary" approaches. On the other hand, there may be biases and predispositions that are inherent in our cultures that we are not currently even aware of. Thus, we too must guard against the myopia of the fish about whom it is said would be the last to discover water. Dialogue on principles, philosophy, and underlying assumptions must, for the above reasons, be central to our deliberations here.

Although, in some ways we as communication educators are peculiarly protected from errors of the past, in other ways we are particularly vulnerable. Thus, for example, although the intercultural dimension of speech communication is relatively new and free from some historical and ideological bondage, reference to the broader field finds us engulfed in incompletely examined assumptions and a quite unexamined philosophy of the field. Clearly, as compared to say, a philosophy of science or art, we are sadly lacking. Perhaps this can be viewed as a particularly sad state of affairs when we consider the pervasiveness of speech communication. Studies conclude that for over 70% of our waking time we are engaged in speaking or listening.[7]

As we move to the realm of intercultural speech communication, we become increasingly more aware of the significance of examining cultural and communication assumptions since these are critical in our understanding and assignation of meaning in such settings. What we accept as our underlying values, for example, " . . . are culturally derived notions we have of right and wrong, good and bad, beautiful and ugly, true and

false, positive and negative, and so on. They influence our social perception by providing us with a set of basic precepts from which we judge the behavior and beliefs of others." [8]

To illustrate by just one assumption, let us assume importance of intercultural communication skills as tools for vocational success and economic advance. As London suggests, there might be another base from which to proceed--that of focusing on acquisition and application of thinking skills:

> Unless we look upon education as a process of helping people acquire the necessary skills to think clearly, critically and imaginatively, we are limiting students of all ages to becoming rote learners incapable of acting intelligently in a variety of situations. The highest purpose of education is not to train students for specific roles but to help them gain some understanding of the meaning of their lives and to become more sensitive to other people.[9]

As we examine our assumptions and purposes and procedures here at this conference, I hope we will become aware of some of the biases of Western Civilization and more particularly of Western educational history and contemporary practice. The goals of education are but one example.

Being specific for a moment about what our realm actually is, could serve to bring these somewhat abstract admonitions into sharp relief as they relate to the focus of our conference. Clearly, we have a history. For one conception of this history, we need only cite A History of Speech Education in America. Though Canadian contributions are obviously overlooked, English antecedents are highly developed as they provide background for the history of special education in the United States.

In the selection of antecedents of contemporary speech education and in the deselection of other materials we have a possible example of ethnocentrism. Isn't it possible that there were, for example, Eastern

or Southern influences that were simply not spoken to in that volume but, nevertheless, still in 1976 color our illusions of the history of our field?

Other countries are not without blame on this score. Ethnocentrism is without cultural boundaries:

> We place ourselves, our racial, ethnic or social group, at the center of the universe and rate all others accordingly. The greater the dissimilarity, the farther away they are. We place one group above another, one segment of society above another, one nation-state above another. We tend to see our own groups, our own country, our own culture as the best, as the most moral. This view also demands our first loyalty and, carried to extremes, produces a 'my country--right or wrong' attitude.[10]

These kinds of biases do not just seep into and pervade education, in general, but do affect the teaching of communication in specific. Hopefully, we won't be quite so ignorant in our deliberations as the previously cited fish.

At the same time, in an attempt to avoid these prospective errors, our tendency might be to place ultimate faith in science as an approach. After all science offers a method seemingly free of some of the indicated pitfalls. Still, although science offers some direction, it should not be viewed as a panacea. Polanyi is one who has rather strong feelings about this:

> In the days when an idea could be silenced by showing that it was contradictory to religion, theology was the greatest single source of fallacies. Today, when any human thought can be discredited by branding it as unscientific, the power previously exercised by theology has passed over to science, hence, science has become in its turn the greatest single source of error.[11]

Science has led us to think in terms of cause and effect. This may in itself be inappropriate and limiting. In most cases, the cause of a specific action is an extended event straddling the action in time, and the part in the future is no less causal than the part in the past. Thus, not only is a search for cause/effect unnecessary it also obscures the actual

cause. The search tends to focus on the organism instead of in the past and future where it seems more likely that they actually lie.

Things are not always as they seem. We expect that if we do something, something else will result. However, social systems, which we are concerned about here, can be viewed as counter-intuitive. They simply don't work the way people expect them to. Jay Forrester stressed that:

> Social systems are insensitive to most of the policies that people adopt in an effort to alter the behavior of a system. In fact, says Forrester, a social system tends to draw people's attention to the very points at which attempts to intervene will fail. For instance, a person observing human suffering in the cities notices that the poor people are living in inadequate housing, so he presses for more housing. When new low-income housing is built, more poor people are drawn into the area, because of the availability of cheap housing, but since low-income housing does not create jobs, more and more people are trapped in the depressed area, unable to get jobs because of the surplus of labor but too poor to live elsewhere.[12]

The realm with which we, at this conference, are concerned is somewhat different than low-income housing, but the caution is not less applicable. It would be easy for us to make similar mistakes assuming that if we do certain things the expected response will be "X." Clearly, there is not all that much predictability and this should be taken into account as we make plans.

Thus, this author is particularly wary of grand scale plans as applied to any circumstance. It is pleaded that our conference proposals be cloaked as probes and possibilities rather than be alls and end alls. Experience suggests that often plans are tediously drawn out, sometimes expensively mounted and frequently tossed in the drawer and forgotten. In addition, grand schemes are an imposition and an intervention. What we, in our field, know about attitude change and commitment should alert us to the dangers of imposing ideas on others.

The easy answers are easy. However, the easy answers may not be the best answers. What is the "obvious" solution may not lead to the desired outcome. "Realities" may differ. We should be particularly sensitive to differing realities since this is an intercultural conference.

Our subject, in sum, is relatively specific: What can we as teachers and administrators do to insure the young will acquire the communication competencies needed to function in a rapidly changing world? The plea of this paper is that we not jump directly into attacking this question before fully examining our underlying assumptions, clarifying our goals, and providing for reevaluation of whatever is decided as more information becomes available. Unless we take this course of action we face what is perhaps the ultimate danger, that our deliberations will be full of sound and fury and still another example of signifying nothing.

FOOTNOTES

1. W. Senteza Kajubi, "Is the School an Obsolete Institution?" A paper presented to the World Conference on Education, Asilomar, California, March 5-14, 1970, p. 14.

2. Isaac Asimov, "Colonizing the Heavens," Saturday Review, June 28, 1975, p. 12.

3. Asimov, p. 17.

4. Edward DeBono, New Think, New York: Basic Books, 1967.

5. Benjamin DeMott, "Hot-Air Meeting," Harper's, July, 1975.

6. Paulo Freire, Education for Critical Consciousness, N.Y.: Seabury Press, 1973.

7. Walter Loban, The Language of Elementary School Children. Champaign, Ill.: National Council of Teachers of English, 1963, p. 88.

8. Richard E. Porter. "An Overview of Intercultural Communication," in Intercultural Communication: A Reader, Edited by Larry A. Samovar and Richard E. Porter, Belmont, CA.: Wadsworth Publishing, Co., 1972, p. 6.

9. Jack London. "The Social Setting for Adult Education," in Robert M. Smith, et al., eds., Handbook of Adult Education, New York: Macmillan, 1970, 20-21.

10. Porter, p. 6.

11. Michael Polanyi, "Scientific Outlook: Its Sickness and Cure," Science, 1957, 125, 480-484.

12. Hazel Henderson, "The Counterintuitive Character of Social Systems," The Futurist, August, 1971.

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   For those seeking background, this is the report of the Memphis Conference of Teacher Educators.

2. Arnold, W. E., Valentine, C. A., Katz, A., and Serota, K. B. The World Beyond Words: The Nature of Non-Verbal Communication. St. Paul, Minn.: West Publishing (scheduled, Fall, 1976).

   Explores intercultural dimensions of non-verbal communication.

3. Castenada, Carlos. Tales of Power. New York: Simon and Schuster, 1974.

   For additional explorations into the unknown, also see: Journey to Ixtlan, A Separate Reality, and The Teachings of Don Juan.

4. De Bono, Edward. New Think. New York: Basic Books, 1967.

   Concerned with the creation of new ideas.

5. Freire, Paulo. Cultural Action for Freedom. Cambridge, Mass.: Center for the Study of Development and Social Change, 1970.

   Discusses basic assumptions and culture and the nature of human beings.

6. Polanyi, Michael. "Scientific outlook: Its sickness and cure. In Science, 1957, 125, 480-484.

7. Slater, Philip. Earthwalk. New York: Doubleday, 1974.

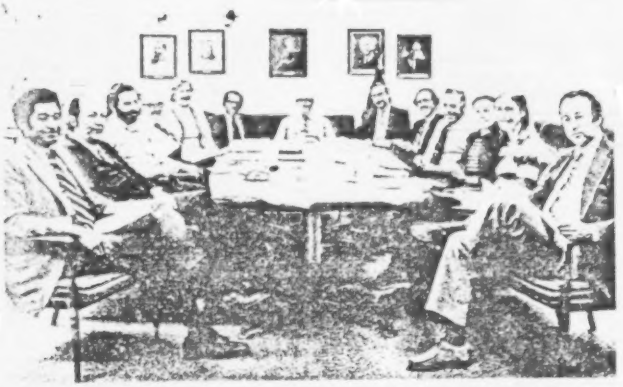
   Slater explores the roots of Western culture and suggests how to rise above self-destruction.

8. Karl R. Wallace, Editor, History of Speech Education in America. New York: Appleton-Century-Crofts, Inc., 1954.

   As close as we come to an in one place history of the field in the United States.

9. World Council for Curriculum and Instruction
   c/o Dr. Alice Miel
   Box 171
   Teachers College
   Columbia University
   New York, NY 10027

   An organization worth commending to those interested in international education.



School of Education 1974-75 Executive Committee: left to right, Don Harrison, faculty; Morton Gordon, faculty; Roger Palay, student; Associate Dean Frederick Bertolaet; Eunice Burns, executive assistant; Assistant Dean Percy Bates; Dean Cohen; Assistant Dean Rudolf Schmerl; Frederick Goodman, faculty; W. Robert Dixon, faculty; Irene Heller, faculty; Phyllis Haight, student; and William Cave, faculty. On the wall in the background are photographs of former deans and distinguished professors, School of Education.

body of knowledge of desirable and better ways to rear children.

U.S. Commissioner of Education Terrel H. Bell has expressed his concern about the weakening of the American family. He feels that training for parenthood should be a prime national concern. Through education for parenthood, he indicates, we can help strengthen the family as the fundamental unit in American society. Bell suggests that schools teach some fundamental concepts to parents which will generate an awareness that they are the child's first teachers and that the quality of life provided at home during the preschool years will affect and shape the child throughout his adulthood.

The U.S. Department of Health, Education and Welfare, through its Office of Education and the Office of Child Development, launched in 1972 a program called Education for Parenthood in a nationwide effort to reach adolescents and help them prepare to be effective parents. Several high schools in the nation have offered the program to their students. But parent education should not be limited to high school students. Programs at the college level—when many young people are actively thinking about parenthood and career choices—must also be developed. Schools of education should develop and implement an innovative, interdisciplinary program to educate potential parents so that when confronted by parenthood they can 1) better understand and encourage their children's full growth—especially speech and language skills—and 2) help educate other parents who need assistance in child raising. The necessity for such programs at the college level has long been recognized by child development specialists. It has also been recognized that disadvantaged parents need special assistance, the kind of help that volunteers—trained in child-growth materials and techniques in school of education programs—could offer as a community service.

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The long-range objective of parent education, as Commissioner Bell has stated, is to strengthen the family as a fundamental unit in our society. But the immediate task of parent education would be to help parents become more confident and knowledgeable in the rearing of their children. Concerned with changing the parental role from one guided by cultural traditions and internalized values to one in which parents become their own judges of good and evil and seek to develop a highly conscious, rational role, parent education can achieve several ends, but, above all, it can influence parent behavior in ways beneficial to the child—particularly his mental health and intellectual development.

Interdisciplinary in nature, the content of a parent education program could include child development (physical, emotional, social, and intellectual); parent behavior, including data on child-training practices in different cultures; case studies of parents' modes of handling a given child-rearing situation; discussion of basic research studies of child development and parent-child relations; and principles of home management.

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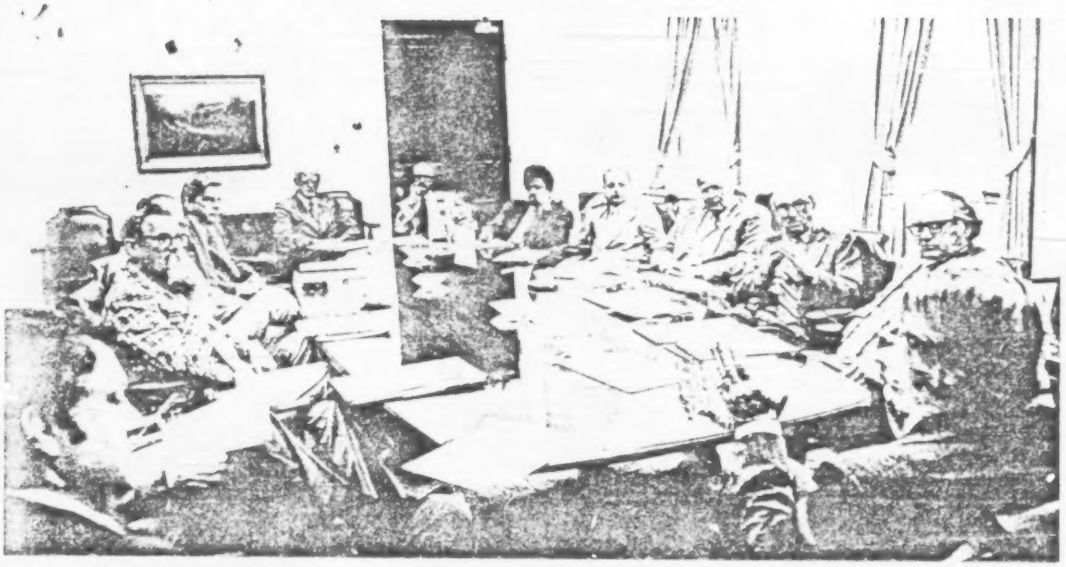
Parent education thus aims to produce an informed parent and parent educator who understand the way children develop and the effects of parental behavior on the child's personality. The result would be not only a strengthening of the family but also fewer school failures and a smaller number of unhappy, "problem" children.

Appendix I

Life-long Learning: A Challenge

Tremendous changes have occurred at all levels of our society within the past 75 years, and changes equally dramatic will undoubtedly dominate the next 75 years. Scientific and technological discoveries, for example, have been nothing less than revolutionary, and their impact on people, society, and institutions has been profound. We cannot see all the possibilities ahead of us, but their implications are bound to be equally extensive and radical.

Consequential changes are occurring in our attitudes toward all aspects of life. In the past, for example, a person remained throughout his working life in one occupation and social level. But today occupational, geographic, and social mobility are widespread. Women, minorities, and ethnic groups are demanding and playing a more substantial role in all activities. Many young people are experimenting with new lifestyles; as a result, a greater variety of styles is now tolerated. We now have more elderly people than we had in 1900 because most of us are living longer. And many workers have more leisure time and better retirement opportunities and



Vice President Nelson Rockefeller (back to camera) meets with Dean Wilbur J. Cohen (second on Rockefeller's right), Associate Dean Frederick Bertolaet (to right of Rockefeller), and other deans of schools of education in Michigan to discuss federal education legislation and appropriations.

retirement income than ever before in our history. All these changes and others have occurred with amazing rapidity. Very often it is the speed of change which has made it difficult for people to adjust to new conditions. It is hard for many of us to adjust to the fact that what we have learned or believed in the past may suddenly no longer be relevant or acceptable.

The forces and pressures of our times require individuals to process and absorb new information continually throughout their lives. This new information can affect their jobs, homes, recreation, retirement, and their children, schools, church, and community. Learning has thus assumed life-long dimensions as it has become a process which commences at birth and terminates at death. Not all learning, however, is necessarily obtained in schools; although schools are a vital part of the learning process, parents, peers, and community institutions also play a critical role. Some people assume they have completed their education after receiving a degree or other credential, but a degree does not end their learning—it is only a passport to begin the world of work and to improve the quality of life.

In my forty years of adult experience I have found that the person who learns by doing, by thinking, and by experience is a valuable member of any group. The individual who has curiosity, a willingness to question the status quo, and a desire to know more about his or her assignment is likely to believe in life-long learning. Our educational institutions must become more responsive to these individual needs; they must experiment with nontraditional ways of teaching, learning, and living. They must make accommodation for the wide variety in human need and capacity.

Education could take the leadership in fashioning programs for persons of all ages and needs. We could, for example, hold more institutes, workshops, and seminars on Saturdays, Sundays, and evenings. We could encourage employers and unions to give workers a periodical sabbatical to learn new skills or develop new careers, and we could urge the extension and expansion of educational television programs. Schools and community institutions could provide early childhood education centers and establish senior citizen centers in every neighborhood. Educators and those in educational leadership positions at the state and federal levels should emphasize these objectives of life-long learning and make it possible for people who believe in the concept to experiment and innovate. Federal and state funds should be earmarked for this purpose.

Life-long learning is our hope for a better world and for self-fulfillment for more people. It is an enterprise in which young and old may join . . .

The idea of life-long learning is both conservative and radical. It accepts experience and yet questions the existing order. It values the past but looks toward the future. It does not repudiate credentials, but it does not accept them as the only evidence of learning. Life-long learning is our hope for a better world and for self-fulfillment for more people. It is an enterprise in which young and old may join, as Charles Perrault wrote, "to rise to great things and stoop to small ones."

Our society is bombarded today with grim forecasts of the future. I do not think an ominous future necessarily lies ahead. We can create a more just society and a more responsible and responsive set of institutions. But to do so, we must utilize our best brainpower. There is a vast reservoir of ideas among all of us which go unutilized. A nationwide program of life-long learning could unleash some of these ideas, and all of us would gain. Now is the time to take up this challenge and make 1976 the year we place new emphasis on education to the benefit of our national life.